



CENTER FOR
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CAPSTONE WHITE PAPER
by
EAGLE INTERNATIONAL, INC (EGI)
Woodbridge, Virginia

Volume 1 AMEDD of the Past & Present
(FY 96 and Before)

Volume II The AMEDD of the Near Term
(FY 2003)

Volume III The AMEDD fo the Future
(FY 2010 & Beyond)

Contract Study

CAAS 97-002

September 1997

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

19980206 140

DTIC QUALITY INSPECTED 2



UNITED STATES ARMY
MEDICAL DEPARTMENT CENTER AND SCHOOL
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REPORT DOCUMENTATION PAGE			Form Approved OMB No. 074-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED
4. TITLE AND SUBTITLE Capstone White Paper			5. FUNDING NUMBERS C96-06-19	
6. AUTHOR(S) Eagle Group International, Inc (EGI)				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Eagle Group International, Inc 4297 East Brookhaven Drive, Atlanta, GA 30319 12988 Orleans Street, Woodbridge, VA 22191			8. PERFORMING ORGANIZATION REPORT NUMBER DADA10-96-C-0009	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Colonel Paul S. Beaty, Chief, Center for Healthcare Education and Studies, AMEDDC&S 3151 Scott Road, Fort Sam Houston, TX 78234-6100			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Unlimited			12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 Words) Volume I provides an historical overview of the events and influences that have compelled the AMEDD to begin a fundatmental transformation in order to strategically alignn itself for the future in light of its future vision. Volume II analyzes the futre vision and associated strategic planning references, studies, amd guidance of the Army and other key external agencies to identify trends and factors impacting on the AMEDD's future vision. Volume III creates a blueprint for brining the AMEDD's future cision to fruition, consistient with what the Army and other key external agencies are proposing to do within their respective spheres.				
14. SUBJECT TERMS			15. NUMBER OF PAGES 200	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT U	18. SECURITY CLASSIFICATION OF THIS PAGE U	19. SECURITY CLASSIFICATION OF ABSTRACT U	20. LIMITATION OF ABSTRACT	

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FOREWORD

This is the first of three complementary volumes constituting a White Paper that articulates "The Future Vision of the Army Medical Department (AMEDD)." The principal thrust of each of the respective volumes is as follows:

- | | |
|-------------------|--|
| VOLUME I | AMEDD OF THE PAST AND PRESENT (FY 96 AND BEFORE)
Provides an historical overview of the events and influences that have compelled the AMEDD to begin a fundamental transformation in order to strategically align itself for the future in light of its future vision. |
| VOLUME II | THE AMEDD OF THE NEAR TERM (FY 2003)
Analyzes the future visions and associated strategic planning references, studies, and guidance of the Army and other key external agencies to identify trends and factors impacting on the AMEDD's future vision. |
| VOLUME III | THE AMEDD OF THE FUTURE (FY 2010 AND BEYOND)
Creates a blueprint for bringing the AMEDD's future vision to fruition, consistent with what the Army and other key external agencies are proposing to do within their respective spheres. |

An organization's vision is a defining statement of an enduring nature and should neither be taken lightly nor changed frequently. Its articulation serves to reveal and declare true intent, and must constitute a candid and relevant declaration of motives. As such, it establishes a clear sense of purpose and conveys expectations of realistic outcomes to be achieved. In these regards, it contributes to the building of consensus and cohesion by providing a common point of departure for understanding and acceptance. This promotes participation and commitment by serving to inspire and motivate. Finally, it constitutes the basis for the making of subsequent decisions, the formulation of supporting strategies, and the eventual development of implementing action plans.

Any vision of the future needs to be shaped in light of both the past and the present. It must give cognizance to the organization's history and experiences, its cultural identity and values, its reason for existence, and its current sense of purpose and direction.

BACKGROUND - THE ARMY AND THE AMEDD OF THE COLD WAR ERA

In the Cold War environment of a bipolar world prior to the 1990's, our National Military Strategy was primarily focused on containing and, if necessary, deterring the adventurism of a hostile global superpower, the Soviet Union. The monolithic threat posed to Europe by the well-equipped, well-trained, numerically superior, and tactically poised forces of the Soviet Union and its Warsaw Pact allies necessitated our Army's being capable of fighting and winning a major land war in Europe in concert with our NATO allies. At the same time, the Army was charged with being able to simultaneously respond to a Major Regional Conflict (MRC) in some other part of the world in which the United States' vital interests might be placed at risk, primarily seen to be Korea or Southwest Asia. This required the existence of a fairly large standing army, backed by a substantial reserve component and an industrial base that could be surged to support wartime requirements. Given the in-place posture and offensive orientation of the Soviet Union, minimal lead time was expected in which to build up our forces to respond prior to the commencement of hostilities. Accordingly, much of the Army's active force structure had to be forward-deployed, not only to serve as a deterrent to potential Soviet aggression but to effectively contain any initial attack until sufficient reinforcements could be deployed from the Continental United States (CONUS) base. Any major land war in Europe was projected to involve large numbers of units operating as part of a highly structured force (under AirLand Battle doctrine), be extremely violent, and result in high attrition rates among both men and materiel. The Army was heavily dependent upon mobilization of its reserve components to be able to provide the requisite force structure for winning in the European Theater, and on the mobilization of the sustaining CONUS base to maintain the necessary flow of replacements and materiels until conflict termination. Severe strategic lift constraints necessitated the in-place existence within Europe of a substantial theater logistical infrastructure and prepositioned equipment and supplies. Both Soviet and NATO forces were nuclear capable, raising the potential for a conventional war going tactically nuclear with an exponential increase in battlefield casualties. That potential raised the attendant danger of an escalation into a strategic nuclear exchange. In general, the Army was sufficiently resourced to meet the Soviet threat faced in Europe, in concert with our allies, as well as to simultaneously deal with a MRC, as in

Korea. During the 1980's the Army had embarked on an aggressive modernization program that contributed to significant enhancements in its weapons systems and warfighting capabilities, and served to qualitatively offset the resource superiority enjoyed by the Soviet Army during most of the Cold War period. In short, the Army approached the end of the 1980's as a better resourced, equipped, and trained force, prepared to deal with potential adversaries in both the European and Pacific Theaters.

The AMEDD's total end strength and force structure during the Cold War period were predicated on a number of planning factors, principally:

- The number of active and reserve divisions in the Army structure, within which AMEDD assets were organic
- A Department of Defense (DOD) established Theater Evacuation Policy of 30 days, designed to maximize in-theater Returns-to-Duty (RTD) of casualties
- Projected Wounded-in-Action (WIA) and Disease and Non-Battle Injury (DNBI) rates associated with intense warfight scenarios involving heavy forces, which drove the size of the Tables of Organization and Equipment (TOE) field medical structure
- The projected number of Army hospital beds required to be mobilized within the CONUS base to accommodate a large number of returning casualties.

In the aggregate, these factors contributed to a requirement for a fairly substantial AMEDD end strength and mix of type TOE medical units, approximately 70% of which were contained in the reserve components. As with the Army's combat forces, a substantial percentage of the AMEDD's active TOE force was forward-deployed between the European and Pacific Theaters, so as to be immediately available and operational at the onset of any hostilities. Introduction in the late 1980's of the new Medical Force 2000 (MF2K) medical concepts, coupled with fielding of the new Deployable Medical Systems (DEPMEDS) hospitals and other modernization initiatives, served to greatly enhance the AMEDD's capability. In short, the AMEDD was better

resourced, organized, equipped, and prepared than ever before to support the Army under the demands of a major land war in Europe, and the occurrence of a simultaneous MRC.

CONVERGING EVENTS AND INFLUENCES

During the 1980's, while the Army and the AMEDD were in the process of improving their preparedness to deal with a major land war in the European Theater against the Soviet Union, landmark events and influences were about to have a significant impact upon that effort. Those events and influences would serve to radically alter the international situation and strategic balance of power, compel a review of the Military Services' respective roles and missions, and lead to a transformation of the Army from what it was in the past to what it needed to be for the future.

THE CHANGING STRATEGIC ENVIRONMENT

WHAT IS GOING

(If Not Already Gone)

Bipolar World
Monolithic Threat
Containment
Europe - Soviet
Forward Based
Structured Force Mix
Mobilization Based
Nuclear Capable
Attrition Warfare
Theater Logistics
Bigness

TRANSFORMATION

WHAT IS COMING

(If Not Already Here)

Multipolar World
Diffuse, Varied Threats
Crisis Response
Regional - Global
CONUS Based
Tailored Force Mix
Force Generation
Non-Nuclear
Precision Warfare
Force Logistics
Smallness

By 1988, information was already being assembled to indicate that the Soviet Union would probably be unable to maintain its position as a global superpower and thereafter remain a significant threat to the interests of the United States, a view that was only reinforced by the precipitous fall of the Berlin Wall in 1989. Subsequent events served to further point to the impending dissolution of the Soviet Union as the principal threat upon which to base the Nation's National Military Strategy and drove the need to formulate a revised National Military Strategy.

Our strategy has shifted from a focus on a global threat to one of regional challenges and opportunities, from containment to a new regional defense strategy. The demise of the global threat of Communism leaves America and its allies with an unprecedented opportunity to preserve with greater ease a secure environment within which our democratic ideals can prosper. Where once a European-wide war, potentially leading to nuclear exchange, was theoretically only weeks and yards away, today such a threat has receded and would take years to rekindle. With the end of the Cold War, there are no significant hostile alliances.

From the National Security Strategy of the United States, January 1993

The anticipated dissolution of the Soviet Union, however, generated a new set of unique challenges for military planners. In the Soviet Union, we had a clearly identifiable and generally understood adversary on whom we could focus, whose capabilities we could assess, whose order of battle we could examine, whose explicit weaknesses we could exploit, and whose forces we could thereby prepare to engage and defeat. The threats of the 1990's and beyond were seen to be far less clear and much more complex, characterized in the 1992 National Military Strategy as "the unknown, the uncertain". Instability and uncertainty were the principal descriptors of the emerging global strategic environment we faced at the beginning of the 1990's. Such instability and uncertainty were seen as contributing to a dynamic environment that would be far more subject to sudden and dramatic shifts over relatively short periods of time, especially in light of the wider and more complex array of concerns the Nation was facing and would continue to face.

COMPLEX CONCERNS THAT HARBOR FUTURE THREATS

Regional Instability	Ethnic and Cultural Strife
Growing Nationalism and Transnationalism	International and Domestic Terrorism
Appearance of Local Despots and Fanatics	Uneven Economic Development
Proliferation of Sophisticated Weapons	Natural or Manmade Disasters
Technological Proliferation	Poverty and Despair
Drug Trafficking and Drug Cartels	Environmental Risks and Degradation
Rejection of Western Culture and Values	Reversal of Democracies
Renegade States	Information Technology Advances

Etc.

Notwithstanding the broad array of potential threats inherent with those complex concerns, there was a view developing in the early 1990's that the Department of Defense's (DOD) budget could bear substantial reductions in light of the Soviet Union's imminent demise. To some, such was warranted because the United States faced "no significant hostile alliances," and could clearly afford to reduce defense expenditures with no adverse effect on national security. To some, there were higher priorities for the expenditure of scarce resources in support of domestic programs and other initiatives of government. To some, the emergence of an interdependent global economy and the increased flow of information were seen as obviating the need for large standing armies, as armed conflict was considered to not be in the economic best interests of developed nations. To some, current and emerging technologies offered the solution for providing a smaller military force with a comparable, if not greater, degree of combat capability and lethality that would more than offset force reductions. To some, it was time "to bring the boys home," and let Europe bear the principal burden for its own defense.

Whatever the various rationales put forth and the validity thereof, the blunt fact faced by DOD and the Services was that resources were going to become increasingly constrained, and that the period of relatively adequate resourcing enjoyed during the 1980's was over.

Based on guidance from the National Command Authority (NCA), the National Military Strategy of the early 1990's had shifted its focus from a Eurocentric global war to preparing to deal with regional contingencies, specifically the simultaneous occurrence of two MRC's. It presumed that our response to such regional contingencies would be in light of strategic alliances that supported our vital interests, and involve multinational operations wherein we would act in concert with others in dealing with the threat presented. At the same time, our strategy directed that we retain the capability to respond on a unilateral basis to those situations involving our vital interests, whether we were joined by others or not. Most importantly, the focus shifted from having large numbers of forward-deployed forces to being able to project forces from CONUS.

U.S. NATIONAL MILITARY STRATEGY

Deter aggression, and should deterrence fail, defend the nation's vital interests in the uncertain world of the future.

- **Regional Focus**
- **Strong Alliances**
- **Multinational Operations**
- **Capability to Act Unilaterally, if Necessary**

We are not the world's policeman, but the world looks to us for leadership

As we entered the 1990's, the Army had already begun the process of downsizing from its Cold War force structure. From an active end strength of 770,000 in 1989, the Army was programmed to have reduced to an end strength of 495,000 by 1997 - a reduction of some 36%. In 1989, the Army had 216,000 soldiers in Europe, 31,800 in Korea, and 10,000 in Panama; by 1997 those numbers were programmed to respectively drop to 65,000, to 26,400, and to virtually none. From 5 corps and 18 active divisions in 1989, the Army was programmed to have dropped to 3 corps and 10 active divisions by 1997. These figures constitute a significant reduction in warfighting structure, and may not yet represent the final figure. The challenge to the Army was seen to be insuring that the numerical reductions did not result in a deleterious reduction in essential warfighting capabilities.

These changes reflect the shift in the National Military Strategy from having a forward deployed Army to having a Power Projection Army, based mostly in CONUS, with the ability to rapidly project its forces anywhere in the world, with relatively little lead time.

FORCE PROJECTION REQUIREMENTS

<u>In</u>	<u>Be Able To Project A</u>
4 days	Light Brigade
12 days	Light Division
15 days	Heavy Brigade, Afloat
30 days	Two Heavy Divisions, from CONUS
75 days	Five Division Corps (with associated CS and CSS)

Force projection mandates that the deploying force be trained and ready to go, on short notice, and has the available strategic lift to be taken where needed. The force has to be readily tailorable to do the mission expected of it, as the limited strategic lift cannot be burdened with the deployment of extraneous units or materials that are not essential to accomplishment of the mission at hand. It also means that the deployed force has to be predominately an active component one, since lead time may be insufficient to mobilize reserve component units before the flow of forces has to commence.

Key to the Army's vision of its future, which had already begun to evolve as we moved into the 1990's was the concept of Third Wave Warfare. In their book War and Anti-War, Alvin and Heidi Tofler describe three waves of warfare, as schematically depicted below.

Graphic #7

First Wave (Agrarian) Warfare involves an armed confrontation in which the principal weapons systems are lightly armed individuals, such as guerrillas or urban terrorists. They have neither the staying power nor the intention to become decisively engaged, and prefer to selectively seek confrontations that minimize exposure and risk, are of relatively short duration, and involve a lower level of intensity.

Second Wave (Industrial) Warfare involves the closing together of well-organized forces and their weapons systems in a force-on-force battle until one of the opponents is forced to retreat and regroup, with the battle being rejoined in successive iterations until one side has been so attrited that it is obliged to completely capitulate. Such warfare requires proportionately large numbers of forces and weapons systems to accommodate the attrition expected to occur. The principal problem is that substantial attrition can occur on both sides, to the extent that the "winner" may be as nearly debilitated as the "loser" by the time the last battle has been fought.

Third Wave (Information) Warfare involves the closing together of forces and systems, but under conditions and on terms that are decidedly favorable to one opponent, and will contribute to a final decisive victory over the other. This new wave of warfare is based on the application of sophisticated technology and information systems, but it involves far more than just hardware and software. It requires a new way of thinking that relates to the application of both science and art. The science part involves the business of information processing and the transfer of data on a real-time basis. The art part pertains to how the information is then processed, analyzed and applied so as to translate into a decisive victory. It envisions the ability to locate the enemy force, severely attrit it from a distance with sophisticated stand-off weapons, and close in for a decisive defeat, while at the same time denying the enemy force a comparable opportunity. It provides the means wherein a numerically smaller force can defeat a numerically larger one, and significantly minimize its own losses of men and materiel in the process. We already have some insights regarding the characteristics of a Third Wave Warfare battlefield. They are going to have a significant impact on how the Army conducts the warfight, and how the AMEDD goes about medically supporting it.

Effectively functioning on a Third Wave (Information) Warfare battlefield will be vastly different and far more complex because of the new combat capability and lethality presented by emerging technologies. It involves a fundamental and revolutionary shift in that it demands the effective and timely management of real-time information to see, control, dominate, and win. Preparing the Army to be effective on Third Wave Warfare battlefields will necessitate major changes in the Army's tactical, organizations, doctrine, equipment, force mixes, and command and control procedures.

INSIGHTS RELATIVE TO THE THIRD WAVE WARFARE BATTLEFIELD

- Quantum increases in lethality of weapons systems
- Far greater dispersion of forces to reduce targetability
- Premium placed on unit cohesion in geographically dispersed units
- Increased volumes and precision of fires over longer distances
- Integrative technologies to better feel and understand the battlefield
- More effective maneuver over greater distances with greater control
- Ability to rapidly adjust to frequently changing situations
- Enhanced integration of combat, combat support, and combat service support
- Ability to make the battlefield transparent for the commander
- Ability to make the battlefield opaque for the opponent

The Gulf War of 1991, while imminently successful from a military standpoint, surfaced a number of significant lessons learned that were of major importance to the Army and its effort to transform itself into a Power Projection Force of the future. While a complete examination of those lessons learned is beyond the purview of this document, several broad points warrant notice. Operations Desert Shield/Storm demonstrated the difficulties of strategically inserting a large force into a relatively austere area of operations, and the need for an enhanced strategic mobility capability based on an effective balance of prepositioned assets, strategic sealift, and strategic airlift. It exposed disconcerting shortfalls in the Combat Service Support (CSS) arena, especially with respect to the ability to maintain visibility over supplies enroute to and within the theater of operations, and being able to manage and track getting those supplies in a timely manner over substantial distances to where they were needed. It indicated a need to rethink the role of the CONUS sustaining base and the in-theater use of civilians (both Department of the

Army and contractor personnel) in support of deployed forces. It identified a need to seriously reexamine the structure, enhance the capabilities, and improve the training posture of the Army's reserve components, as well as to more closely integrate the active and reserve components in the planning for and execution of contingency operations. It emphasized, beyond any doubt, the criticality of being able to maintain communications and manage battlefield information in support of a fast-paced operations tempo (OPTEMPO) over an expansive battlespace during an extremely short period of force-on-force conflict. Most importantly, it unequivocally demonstrated the necessity of the Army's being able to fully integrate its own operations within the context of a larger joint force operation, as well as part of a coalition of allied forces.

The Gulf War has been viewed by many as the first example of warfare in which a Second Wave (Industrial) army was devastated by a Third Wave (Information) army that had only just begun to exploit and apply Information Age technology to the battlefield. In this regard, it served to reinforce the need to accelerate the further transformation of our Army, and confirmed the Army leadership's view that the transformation would require substantive, constructive changes with respect to our existing doctrine, tactics, organizations, equipment, force mixes, and command and control procedures.

Graphic #9

In the past, the warfighting commander's decision cycle has been constrained by the availability of information and the time required to effectively act upon it. Over the years, that decision cycle has been compressed by an increasing ability to communicate information over a shorter period of time. Information Age technology is expected to accelerate the pace of the decision cycle by providing the commander with real-time information and view of the battlefield. Those commanders who can best observe, orient, decide and act on opportunities appearing on a Third Wave battlefield will be the ones who will win with minimal losses.

While recognizing the need to change in response to a changing world and threat environment, the Army leadership emphasized the need to maintain those enduring values and the foundation of warfighting imperatives upon which the core competencies of the Army rested -- values and imperatives that have given the Army the edge over its adversaries in the past and are essential for it to maintain that edge in the future.

THE ARMY'S ENDURING VALUES

Courage	Candor
Integrity	Competence
Loyalty	Commitment

Fair Treatment
Personal Responsibility
Selfless Service

THE ARMY'S SIX FUNDAMENTAL IMPERATIVES

Quality People
Competent Leaders
Challenging Training
Modern Equipment
Viable Force Mix
Effective Doctrine

Given the continuity of such enduring values, and the adequate resourcing and balancing of such fundamental imperatives, the Army would remain the kind of trained and ready force that holds the competitive edge over any adversary. Given a willingness to critically examine and shed old ways of doing business, the Army would be able to change for the better and fully capitalize on the opportunities offered by current and emerging Information Age technologies. Given a willingness to adapt to and embrace new ways of doing business, the Army would grow into the

type of organization it needed to be to effectively deal with future threats and mission requirements.

Graphic 12

The Army's senior leadership did not expect that the transformation from an Industrial Age (Cold War) Army into an Information Age (Post-Cold War) Army would be easy or accomplished overnight, but knew it was one that had to be undertaken. In preparing to do so, two points were made that had to be kept foremost in mind. The first is best summarized by comments extracted from Army Focus, 1992:

Transformation starts at the top... It requires every aspect of the Army (training, management, health care, installations, etc.) to be reexamined, and requires every relationship -- internal, external, formal, and informal -- to be considered in detail... It is not just a new management model, it is a totally different way of conducting our daily business... Accepting the transformation process requires a new mind-set, one willing and ready to investigate and change established organizational management patterns.

The second point relates to how the Army approached the business of reengineering itself to deal with the uncertain, unstable and dynamic threat of the future. The Army had been down the demobilization road before, the invariable result of which was a major downsizing that principally served to reduce essential warfighting capabilities. The Army repeatedly paid the price, in blood, for not having retained essential warfighting capabilities during the initial stages of each war in which we subsequently had to fight. This time, the Army had to break the historical mold without breaking the fighting edge. That meant more than simply downsizing the Army, because that approach could potentially serve to create a smaller, less capable, and ultimately hollow warfighting capability. The transformation into the Army of the future had to be studied and deliberate, and had to be one that was done right.

Graphic #14

This, then, was the ultimate challenge facing the Army as it emerged decisively victorious from the Gulf War -- to move boldly ahead in the face of an uncertain, unstable and dynamic environment to transform itself into the kind of Army that would be needed to win decisively on all battlefields of the future.

THE TRANSFORMATION HAS TO RESULT IN
NOT
JUST A SMALLER COLD WAR ARMY
BUT
A DIFFERENTLY ORIENTED ARMY
WITH A DIFFERENT STRUCTURE AND FOCUS
THAT IS BETTER

The Army's vision of the future is embodied in the concept of FORCE XXI, the implementation of which will serve to move the Army into the 21st Century in a studied and deliberate manner that keeps the fighting edge intact through the leveraging of technology. The plan, and the challenges, associated with moving from the Army of 1989 to the Army of 2010 and beyond will be addressed in more detail in Volume II. At this juncture, however, it is important to identify the three principal axes along which the transformation of the Army has already begun and will continue. The eventual confluence of efforts along those three mutually supportive and complementary axes will serve to produce a FORCE XXI that truly represents a complete transformation of the Army, from front to rear.

Graphic #16

Like the rest of the Army in the 1980's, the AMEDD had already begun the process of downsizing from a Cold War posture. Between 1989 and 1998, a 31% reduction was programmed in the active AMEDD's personnel strength. The Army National Guard (ARNG)

and United States Army Reserve (USAR) were similarly programmed to undergo reductions in AMEDD personnel authorizations. The reduction in AMEDD strength within the ARNG was especially large, projected to drop from 25,160 in 1994 to 14,219 by 1997, or some 43%.

Concurrent with the personnel reductions came a requirement to reduce the number of TOE (field) type medical units, across all components of the AMEDD. Within the active AMEDD, TOE medical units were programmed to be reduced from a 1989 total of 236 to 145 by 1997, or about 30%. Within the reserve components (ARNG and USAR) an even greater percentage of TOE medical units were slated for deactivation, from a total of 530 in 1989 to 237 by 1997, or about 55%. Specific reductions projected for certain types of TOE medical units were disconcerting, especially with respect to TOE hospitals. At the same time that the AMEDD was losing TOE hospitalization capability, major closings were projected for active component TDA (Table of Distribution and Allowances, or, Garrison-type units) Medical Treatment Facilities (MTF), or hospitals, in CONUS.

TDA MEDICAL TREATMENT FACILITIES (TDA) FORCE STRUCTURE			
	AS EXISTED IN <u>1988</u> 47 TOTAL		PROJECTED TO REMAIN <u>IN FY99</u> 29 TOTAL
CONUS:	33 <u>(-27%)</u> →		24 : CONUS
OCONUS:	14 <u>(-65%)</u> →		5 : OCONUS
(AN OVERALL REDUCTION OF ABOUT 38%)			

TOE (FIELD-TYPE) HOSPITALS FORCE STRUCTURE			
	AS EXISTED AT THE END OF THE <u>1980'S</u> 162 TOTAL		PROJECTED TO EXIST UNDER <u>TAA-03</u> 52 TOTAL
ACTIVE:	38 <u>(-60%)</u> →		15 : ACTIVE
ARNG:	25 <u>(-100%)</u> →		0 : ARNG
USAR:	99 <u>(-63%)</u> →		37 : USAR
(AN OVERALL REDUCTION OF ABOUT 68%)			

Some of the reductions, in AMEDD personnel and field medical units, were logically to be expected in light of the withdrawal of forces from Europe, the reduction in the number of Army Divisions, Base Realignment and Closure (BRAC) initiatives, and other actions. The problem was that only an 11% decrease was forecast in the size of the total eligible beneficiary population

remaining to be supported by the AMEDD. In this regard, the potential workload remained substantially the same for AMEDD MTF's, although the resources with which to accommodate that workload were programmed to steadily decrease.

Additional pressures surfaced following the Gulf War that harbored the potential for driving further, if not draconian, reductions in AMEDD strength and capabilities. Ironically, such pressures arose because of the AMEDD's very success in minimizing WIA and DNBI casualties during the Gulf War, which were the lowest experienced during any previous conflict in our history. Such was seen by some analysts as evidence that the continued application of Third Wave warfighting technologies and capabilities would serve to similarly minimize casualties in future conflicts. Foremost among those pressures has been the Congressionally-mandated review of the Commission on Roles and Missions (CORM). As part of its analysis of 26 major functional areas within DOD, one of which related to Medical Readiness and Health Benefits, the CORM posited three broad options:

COMMISSION ON ROLES AND MISSIONS STUDY OPTIONS

- OPTION 1: Continue with plans to implement DOD's TRICARE program initiatives as the means to improve patient care and combat readiness posture.
- OPTION 2: Scale back MTF's and active medical manpower to provide peacetime care only for active duty (AD) in CONUS and AD and dependents OCONUS.
- OPTION 3: Transfer all CONUS peacetime care, to include AD care, to civilian options; focus whatever is left of the military medical system on readiness for deployable forces and the provision of care to AD and dependents OCONUS.

Option 1, naturally preferred by all three of the Services' medical departments, is probably less likely to be the final recommendation of the CORM than Options 2 or 3, or some combination thereof -- in spite of the fact that there is an inextricable linkage between the delivery of health care services in the peacetime system and being prepared to deliver responsive combat casualty care on the battlefield. The premises, numbers, and percentages continue to be debated, and the

outcome of the CORM Study's recommendations and the actions taken with respect thereto are by no means certain. If such a course of action were imposed along the lines of other than Option 1, it could serve to reduce the AMEDD's medical support capabilities and Graduate Medical Education (GME) programs below the critical level necessary to sustain the military health system in a meaningful way. It would threaten the very essence of the AMEDD's ability to maintain a viable, sustainable medical support platform for the Army.

By most key measures, medical support provided by the AMEDD during the Gulf War was an overwhelming success, and stands as a tribute to the commitment and professionalism of the over 23,000 AMEDD personnel who deployed, of which some 55% were members of the reserve components. In support of the operation, the AMEDD deployed and sustained a field medical infrastructure that was the largest since World War II, providing a capability in three months that had taken nearly three years to achieve during the Korean Conflict. Such was especially noteworthy in light of the fact that the AMEDD was charged with continuing to provide the same level of health services support to beneficiaries in CONUS/OCONUS during the entire period of the operation.

Nevertheless, the AMEDD captured multiple lessons learned that warranted attention. Many of those were amenable to resolution through the modification of policies, doctrine, leader development and training programs, scope of practice, etc. Some, however, were of sufficient importance to warrant the application of major corrective fixes to ensure that the AMEDD was structured and prepared to support future operations of similar type.

The AMEDD force structure employed in the Gulf War, in large part, had been designed to support a different war -- specifically, one that involved a highly structured force on a linear battlefield, in light of a European scenario that involved a protracted force-on-force conflict. The nature of the warfight that actually unfolded was non-linear, characterized by deep thrusts over extended distances, high and continuous OPTEMPO, wide geographical dispersion of units, long Lines of Communications (LOC), and a rapid conclusion of the conflict. Simply and candidly

put, the warfighters outstripped the capacity of the AMEDD to keep pace, a situation that was frequently encountered throughout the Combat Service Support (CSS) community.

Subsequent analysis of lessons learned and insights gained during the Gulf War boiled down to a need for the AMEDD to significantly improve its wartime capabilities in the following major areas:

- The combat readiness posture of both active and reserve component units of the AMEDD
- The structure and functional capabilities of TOE AMEDD units, especially with respect to the provision of far forward care
- Communications and information transfer among AMEDD units, and with external elements all the way back into the CONUS base
- The unified and integrated command and control of AMEDD units
- The development of senior AMEDD leaders capable of orchestrating multifaceted and dispersed medical operations
- Single Integrated Medical Logistics Management (SIMLM) as executive agent for all three Services
- Casualty evacuation on and from the battlefield, and back into the CONUS base
- Interoperability with other Services' medical infrastructures.

Substantive improvements in such critical areas were not achievable simply through the application of incremental adjustments. Dealing with them required a major shift in focus from orienting on systems to orienting on operational capabilities (in both the TDA and TOE spheres), a shift that had been identified by the Army as necessary to accommodate requirements of Third Wave Warfare. That shift would necessitate nothing short of a major reengineering of the Total AMEDD Force that would incorporate and capitalize on Information Age technology, from the Forward Line of Own Troops (FLOT) all the way back into and within the CONUS base. In light of the significant downsizing projected to occur within the AMEDD, such became an imperative.

Perhaps the time is past for field hospitals. We may see only surgical teams at the division level with some holding capacity. "Beds" in the field will really be our evacuation capability - that's a place for the LSTAT [Life Support, Trauma and Transport System] and telemedicine. Nurses may be attendees of the evacuation system with doctors either far forward or in some control booth in the rear.

LTG Alcide M. LaNoue, The Surgeon General, USA

Prior to 1965, government spending on health care had risen at a relatively constant and moderate rate. In the years following implementation of Medicare/Medicaid-related legislation, medical costs tended to explode, for a host of reasons that will not be herein addressed. By the end of the 1980's, health care costs were rising at a rate of 9-11% per year and were projected to continue their upward spiral unless checked. By 1991, medical costs were accounting for 12% of the Gross National Product (GNP), rising to 14% of GNP by 1992. In a similar vein, costs under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) had been spiraling upward, to the extent that they were viewed by DOD to be consuming an inordinate and unacceptable share of its increasingly constrained resources. Responding to that phenomenon, DOD embarked on its CHAMPUS Reform Initiative (CRI) in an effort to ascertain if the application of managed care concepts from the civilian sector could serve to effectively counter and reverse the cost trend. The CRI's pilot project, while not devoid of problems, sufficed to demonstrate that cost-containment through the application of managed care concepts and utilization review techniques was an achievable objective and one that would not serve to compromise access to or the quality of care. Accordingly, DOD began a concerted push towards developing and implementing a formal managed care program for all CHAMPUS-eligible beneficiaries residing within CONUS.

From the CRI arose DOD's TRICARE program, one intended to balance cost containment, access, and quality in an effective manner, with the objective clearly being to reduce the cost factor while not degrading the others. Very briefly highlighted, TRICARE involved the establishment of twelve Health Service Regions (HSR), within each of which there was to be a Lead Agent designated from one of the three Services. The Lead Agent was responsible for the

development, competitive award and subsequent administration of a contract to a civilian contractor for the delivery of health services to eligible beneficiaries. The contract as awarded was to be based on a capitation funding arrangement, be tied to an enrolled beneficiary population, and provide a defined package of health services benefits. At the same time, each MTF within the HSR was to have shifted to a similar capitated budget footing, under which resources were allocated based upon the beneficiary population it served.

Eligible beneficiaries within a given HSR were to be offered two broad choices regarding how their health care services would be obtained. Under the first choice, the beneficiary could elect to enroll in and receive all care at an MTF on a no-cost basis. Under the second choice, the beneficiary could elect to enroll in the TRICARE program, selecting from among three available options: "TRICARE Prime," a Health Maintenance Organization (HMO) type option; "TRICARE Extra," a Preferred Provider Organization (PPO) type option; or, "TRICARE Standard," the standard CHAMPUS (basic indemnity) option. Each of the available options was associated with certain comparative advantages and disadvantages that had to be weighed by the beneficiary in selecting from among them, being principally the amount of out-of-pocket expenses the beneficiary would incur. At first glance, the no-cost option associated with enrolling with an MTF would appear to be the logical preference. Such presumes, however, that the MTF could satisfy the beneficiary's expectations regarding access and quality (and whatever else would make the beneficiary happy, such as courteous, respectful staff or clean, attractive clinical areas). If not, the beneficiary could opt to switch to one of the TRICARE program's other options, albeit at increasing levels of out-of-pocket costs. The beneficiary who was not satisfied with either the contractor (HMO/PPO) or the MTF could opt out to use TRICARE Standard, although at the highest level of personal out-of-pocket expense. In that instance, neither the MTF nor contractor would benefit from the beneficiary's capitated payment allowance, and DOD would incur a higher cost for the care provided under a standard CHAMPUS reimbursement payout to some independent fee-for-service practitioner.

The TRICARE program established the foundation for a competitive relationship between contractor and MTF, forcing each to be truly customer-focused in order to attract and retain

beneficiaries from whom their funding would be derived. With the choices available, beneficiaries did not have to accept what they received in the way of care as a take-it-or-leave-it proposition. They could express their dissatisfaction by selecting another option. As TRICARE contractors are going to be in the business of making a profit, they could be expected to look beyond the pure cost containment aspect of the care provided to be attentive to the issues of access, quality and benefits offered. That kind of focus would be required by any profit-oriented activity that sought to attract and retain its customer base in light of a competitor's presence down the street. How successful TRICARE contractors actually are in that regard will be seen when all twelve contracts are in-place and operating by FY 1997, in light of the competition that will be generated by some MTF down the street.

In FY 1992, the AMEDD began to implement its Gateway to Care (GTC) program, an initiative intended to lay the foundation for its transition into a managed care, capitation funded operating environment. To date, that program has demonstrated positive cost-containment results through effective application of utilization review techniques and patient education, while promoting greater accessibility and maintenance of high quality care. How each MTF continues to perform in these regards remains to be seen, in light of the competition that will be generated by the TRICARE contractor down the street.

Implementation of TRICARE/GTC signals a fundamental shift in the AMEDD's approach to the delivery of health care services to CHAMPUS-eligible beneficiaries within the Army and the other Services. It requires a concomitant shift in the mind-set of health care providers, and everyone else in the AMEDD, at all echelons:

PARADIGM SHIFT **HEALTH CARE**

FROM	TO
Acute, Episodic Intervention	Wellness and Prevention
Emphasis on Specialty Care	Emphasis on Primary Care
Disjointed Delivery of Care	Coordinated Delivery of Care
Hospital-centered Focus	Clinic-centered Focus
Needs of Providers	Needs of Patients
Workload Driven Funding	Capitation Driven Funding
Non-Competitive Environment	Competitive Environment
Unilateral Approach	Team Approach
Bureaucratic Orientation	Business Orientation
Vested Interests - Parochial	Sharing - Collaboration
Managerial Rationalization	Managerial Accountability
Technical Orientation	Personal Orientation
Take-it-or-leave-it	Marketing and Feedback
Emphasis on Facilities	Emphasis on Needs
Procedural Orientation	Proactive Approach
One-way Dialogue	Two-way Dialogue
Focus - System Requirements	Focus - Local Requirements

THE CHALLENGE TO THE AMEDD

The AMEDD, along with the rest of the Total Army Force, was challenged by the Army's leadership as far back as 1992 to accept the need for and process of transformation. We were enjoined to apply a new mind-set, one that was willing and ready to examine and change established organizational management patterns. We have continued to be enjoined to have the courage to challenge ourselves and how we go about doing what we do, to be constantly innovative, and learn to adapt and adjust as we go. That experimental methodology provides us with the means to explore new ideas, hypothesize, experiment, review and decide, with the ultimate objective being to contribute to making the AMEDD, and the Army, better. We may not know exactly what the AMEDD's piece of Force XXI will look like just yet, just as the Army doesn't know exactly what Force XXI will look like, as no single construct of what the Information Age and the Third Wave Warfare battlefield are going to bring can be totally and absolutely correct. We were given, however, an azimuth by the Army's leadership along which to move in preparing the AMEDD for supporting the Army of the 21st Century. As part of the Total Army Team, that was what was expected and demanded of us, even though the apparent chaos engendered by the effort could prove to be an uncomfortable experience for those who were advocates of the status quo. Adherence to the status quo no longer remained an option. The AMEDD, and each individual within it, had to be prepared to embrace and deal with the changes that had to come, or get out of the way of those who could do so.

I want each of you in the Army chain of command to develop a vision of what Force XXI means to your command. I want my staff to do the same. Identify proponency, network, challenge the processes we need to change, take risks, encourage innovation. Send me your visions, your thoughts, your papers; send them to each other. Press the envelope...I am confident of our success because America's Army is a growing, learning organization that is truly operating with one foot in the future.

General Gordon R. Sullivan, CSA, USA

PHILOSOPHICAL UNDERPINNINGS OF THE AMEDD'S VISION AND TRANSFORMATION

The development of our philosophical construct for guiding the transformation of the AMEDD has been influenced by a number of thinkers, both within and external to the AMEDD. Their views have contributed to our better understanding how Army Medicine could and should be managed as we approach the 21st Century. From four of those thinkers we derived what have been called our "Four Fundamentals," upon which we have been consistently orienting since 1992 in going about changing how the AMEDD does business.

THE FOUR FUNDAMENTALS

FUNDAMENTAL #1	SHIFTING PARADIGMS
FUNDAMENTAL #2	PROMOTING ASSESSMENT AND ACCOUNTABILITY
FUNDAMENTAL #3	OVERCOMING BUREAUCRACY
FUNDAMENTAL #4	ENHANCING PRODUCTIVITY

FUNDAMENTAL #1 - SHIFTING PARADIGMS: This fundamental derived from the writings of Thomas Kuhn, who posited that adherence to an outdated view or system was impossible to maintain when sufficient new evidence had accumulated to render that view or system obsolete. To Kuhn, the gradual accumulation of such new evidence invariably gave rise to "paradigm shifts," in which the outdated views or systems had to change to accommodate reality. While resistance to the change might be fierce, it was inevitable. A paradigm relates to how a person views the world or what he is doing at any one point in time. Within the AMEDD, most individuals are assigned to positions that functionally orient on but one piece of the action, such as training, clinical practice, research, materiel development, information management, etc. When people become so focused on continuing to do what they do, like they've always done it, they fail to recognize events or influences that warrant change. Problems arise when people become so focused on their respective functional "boxes" that they fail to understand and appreciate, or even care about, what is being done by others in their respective "boxes." The AMEDD had to get people to "think outside their individual boxes," so as to understand how their views and activities impacted throughout the larger system, and vice versa. We had to get

people to recognize the need for shifting their paradigms to accommodate new and better ways of doing business. We had to move from the parochialism, isolationism, and protectionism associated with "boxes" to a broader and more collaborative approach to doing what we do. Our approach had to focus on team building, and promoting our ability to effectively deal with and embrace changes as they occurred. We had to move beyond a disciplinary and multi-disciplinary orientation to one that was truly inter-disciplinary.

FUNDAMENTAL #2 - PROMOTING ASSESSMENT AND ACCOUNTABILITY: This fundamental derived from Arnold Relman, who has written of three eras, or revolutions in health care that have occurred since World War II. The first he coined as the "Era of Expansion," in which there was tremendous growth in the numbers of hospitals, medical technology, health insurance programs, etc. The explosion of health care costs associated with that growth gave rise to the "Era of Cost Containment," when the bill payers of health care began to demand greater fiscal accountability. From that demand came a shift in emphasis to a managed care approach (HMO's, PPO's, etc.) in the delivery of health services, which ushered in the third "Era of Assessment and Accountability." In light of downsizing and constrained resources, the AMEDD had to look at how it did business, and make sure that what was being done made good business sense. We had to provide quality care in a fiscally responsible manner, to realize the best possible value that could be extracted from our expenditure of the resources. We had to learn how to better measure and assess what we were doing, identify more cost-effective and efficient ways of doing it, and begin to hold people more accountable for what they were doing. We had to move from simply being consumers of resources to being world class managers of resources, extracting the maximum value-added benefit from every dollar spent.

FUNDAMENTAL #3 - OVERCOMING BUREAUCRACY: This fundamental derived from the views of Max Gammon, who developed what he coined "the theory of bureaucratic displacement," (or "Black Hole" theory). Succinctly put, Gammon's view was that a bureaucratically-oriented organization will typically consume an ever-increasing amount of resources only to experience a lower level of productivity relative to the investment in resources. In a time of constrained resources, a bureaucracy tends to preserve its infrastructure at the

expense of its productive elements. Given more resources, productivity falls; given less resources productivity falls because it is cannibalized. Perpetuating the bureaucracy becomes the driving force and principal objective. Given the AMEDD's downsizing and constrained resources, we had to shed ourselves of the duplications, inefficiencies, and redundancies associated with an excessive bureaucracy that tolerated functional overlaps. We had to ensure that our limited resources were primarily applied to the productive business of providing health services for our customers. The bureaucracy had to be adequate, but austere, and of the absolute minimum size required to support the production end of our business.

FUNDAMENTAL # 4 - ENHANCING PRODUCTIVITY: This imperative was derived from the views of William Baumol, who postulated that certain professions (such as medicine) could not significantly improve productivity because of the inordinate amount of one-on-one time required to accomplish what is done. More correctly, this fundamental relates to our disagreement with Baumol's postulate, for it fails to account for the fact that the leveraging of technologies and the application of innovative management techniques can substantially improve both access to and quality of medical care. We already have credible evidence that the advent of telemedicine will serve to extend the reach of healthcare providers to support far more patients, independent of location or time. We also have ample evidence that patient access to self-care information, preventive medicine services, and wellness promotion programs can serve to promote a far healthier population of beneficiaries, one that generates less patients with minor illnesses that need to be "seen" by health care providers. Such serves to increase provider workload capacity by reducing the patient load they have to "see" to more manageable proportions, an indirect but effective approach to increasing aggregate capacity and productivity. The less we had to see, the more that could be seen. We had to make some paradigm shifts:

- From focusing on responding to acute, episodic care to focusing on promoting wellness and prevention
- From focusing so much on specialty care to focusing more on primary care, and the employment of managed care concepts

- From having an uninformed patient population to developing an educated one
- From a reactive "come to the clinic" orientation to a "reach out into the community" orientation.

We had to move out smartly with leveraging telemedicine and other Information Age technologies to increase patient knowledge and personal involvement, extend our reach beyond the confines of the hospital/clinic environment, minimize unnecessary interventions, and maximize provider productivity.

The AMEDD is a complex organization that must operate in an uncertain, unstable and dynamic environment, one characterized by a rapid pace of change. The only constant to which we can look with certainty is that the pace of the change is only going to accelerate. There are so many variables, factors and influences emerging that it is almost impossible to predict with a high level of certainty what will happen next year, much less ten or more years into the future. We can not, however, afford to throw up our hands in frustration over the future and simply make do until something eventually happens. Neither can we wait for some higher authority (read bureaucracy) to provide the definitive guidance or action plan required to lay out what is to be done and exactly how to go about doing it. Higher authorities, too frequently, have less insight regarding what needs to be done at lower echelons within the organization than do the people operating down at those echelons. Often, decisions made by some remote higher authority regarding what is to be done have little relevance to what actually needs to be done at lower echelons, and may actually serve to be more of an impediment than a benefit. Hence the importance of understanding one of the key points of Chaos Theory - that orderly and predictable behavior can, in fact, emerge from systems without any pre-design or direct hands-on control. At every echelon, we had to be able to recognize, assess and capitalize on opportunities presented by new ideas, concepts, managerial techniques, and technologies. We had to be able, both as individuals and as a consortium of organizations, to effectively deal with and manage the changes such opportunities would invariably generate. Local commanders had to be given the flexibility, authority and resources to do what they best could see as needing to be done, and they had to be allowed the latitude to take prudent risks in doing it. Their successes, and their

failures, had to be shared across organizational boundaries so that everyone could assess the successes for their applicability and could avoid making the same kinds of mistakes that contributed to failure. That kind of new paradigm contributes to the development of "Learning Organizations" at all echelons, characterized by the free flow and sharing of information. The AMEDD had to shift its paradigm from that of a hierarchical, bureaucratic and authoritarian chain of command to that of a learning organization, in which there existed meaningful communications, collaboration and information sharing. It had to shift from a paradigm of individuals in competition to one of voluntary associations in which expertise, experience and knowledge were both present and freely shared.

It is essential that the AMEDD keep in mind what has made it, like the larger Army, so strong and successful in the past as an institution. We must sustain those same enduring values from which we have consistently drawn our strength and achieved our competitive edge. They are the same enduring values to which the Army subscribes, and do not require reiteration; with respect to their sustainment, however, a word of caution is warranted. In preparing the AMEDD for transitioning into the future, we had to ensure that our enduring values were not "weakened, trivialized, or lost," and that the transformation did not occur at their expense or at the expense of the "institutional" AMEDD. We had to counter the emergence of the insidious disease of cynicism during the period of turbulence, downsizing and change upon which we were embarking. Whatever the size and shape of the AMEDD's future organizational structure as might evolve, we had to ensure that it rested on a sound foundation of enduring values that remained constant. Further, we have to remember that our strength and success in the past have also derived from a sound foundation upon which our core competencies as the AMEDD have been built. That relates to the adequate resourcing and balancing of six Imperatives, the realization of which contributes to the achievement of a trained and ready force.

Graphic #39

Disproportionately emphasizing or resourcing any one of those imperatives at the expense of the others, or ignoring one or more in deference to the others, would result in an imbalance that adversely impacts upon readiness. We had to ensure that our response to constrained resources and force downsizing would not result in a less capable and potentially hollow AMEDD. Like the larger Army, we had to break the historical downsizing mold - to become not just a smaller version of the Cold War AMEDD with stripped capabilities, but a smaller and fundamentally different AMEDD with the right mix of capabilities to do what needed to be done.

In resourcing and balancing those imperatives during a critical and turbulent period, we have to remember to keep our priorities straight. Our number one priority has been, and will continue to be, to provide Soldiers with responsive, effective combat casualty care on the battlefield. That is the ultimate reason for our existence as the AMEDD, and constitutes the principal criterion by which our value-added benefit to the Army will ultimately be assessed and our success on future battlefields will be measured. In this regard, our transitioning efforts had to continuously focus on the AMEDD's "Battle Rules," to ensure that we retained the essential health services support

capabilities required to support a power projection Army's Soldiers across the continuum of military operations, anytime and anywhere.

**AMEDD BATTLE RULES
(ORDER OF PRECEDENCE)**

Medical Presence with the Soldier (Be There)
Maintain Health of the Command
Save Lives
Clear the Battlefield
Provide State-of-the-Art Care
Early Return to Duty

Number one priority is to provide responsive, effective combat casualty care
ON THE BATTLEFIELD.

The preceding discussion should serve to identify the plethora of issues, challenges and needs which the AMEDD faced as it moved from the Gulf War into 1992. We did not have the luxury of selectively dealing with each of them at our own convenience or in our own good time. We had to aggressively face and simultaneously deal with all of them, and we had to do so in an objective, deliberate and integrated manner. Otherwise, we would have had solutions imposed upon the AMEDD by others, solutions that could have served to degrade our essential medical capabilities, core competencies, and readiness.

My primary mission as the new Surgeon General of the Army is to lay the foundation for the restructuring and reorganizing of the AMEDD that will be absolutely necessary over the next five years. Thoughtful self-reorganization is imperative since there are lots of people outside the military medical system who will be only too happy to reorganize the AMEDD if we are not willing and competent to do it ourselves.

LTG Alcide M. LaNoue, The Surgeon General

To effectively accomplish all the kinds of things we identified as needing to be done, we had to promote a shift in paradigm relative to our understanding and expectations regarding health care leaders' roles. If learning organizations were to grow and flourish in the AMEDD, they needed to be headed by leaders who functioned less like bosses than mentors and coaches. If our

AMEDD leadership, at all echelons, was not willing and able to "walk the talk," we were not going to be able to marshal the energies of our people in doing what needs to be done. We had to have leaders who could counter the appearance of cynicism by setting the kind of example worthy of emulation, and instill in their organizations the positive tone and timbre required to support the shift to new ways of doing business in a time of turbulence and constrained resources.

PARADIGM SHIFT - AMEDD LEADER ROLE

FROM	TO	FROM	TO
Provider Oriented	Customer Oriented	Autonomous	Networked
Avoidance	Feedback	Parochialism	Selflessness
Systems Oriented	Capabilities Oriented	High Tolerance	High Expectations
Facility Focused	Services Focused	Employee is Used	Employee is Valued
Reactive	Proactive	I - You View	We - Our View
Traditionalism	Innovativeness	Competitive	Collaborative
Cautiousness	Decisiveness	Directive Mode	Empower Mode
Cynicism	Optimism	Process Focused	Results Focused
Vertical View	Horizontal View	Narrow-minded	Visionary
Self-centered	Team Oriented	Demands Order	Manages Change
Boss/Overseer	Mentor/Coach	Workload	Capitation

In actuality, we had already embarked on our journey of strategically realigning the AMEDD prior to the Gulf War. The four "Vital Links" we espoused as we moved into the 1990's constituted a recognition of, and commitment to, the need to implement changes that would enable us to accomplish our mission in spite of reduced resources. The "Gateway to Care" link related to our commitment to change the way we approached Army Medicine, through the application of managed care concepts and increased emphasis on primary care services. The "Rebuild" link related to our commitment to providing for the greater integration of TOE and TDA force structures, and the reserve components. The "Management Effectiveness" link related to our commitment to providing stable business environments in our MTF's, integrating the activities of our MTF's on a regional basis, applying Total Quality Management (TQM) principles in everything that we did, and promoting the application of innovative business and clinical practices. The "Leader Development" link related to our commitment to building a

requirements-based personnel inventory, making training programs progressive and sequential, and implementing a life-cycle management approach to the development of our people to prepare them to capably perform in both branch-specific and branch-immaterial positions. Early initiatives as undertaken in support of these four "Vital Links" demonstrated our recognition of the need to effect substantive changes, and to do so on an integrated basis across a broad front.

We purposefully focused on three principal themes to guide our approach and efforts in managing change - Readiness, Customer Focus, and Team Building. These themes signaled our intention and determination to bring about a fundamental shift in the AMEDD's corporate philosophy.

THEME #1 - READINESS: We were committed to the development and maintenance of a total medical force projection platform that was designed and resourced to provide quality health care to all beneficiaries, ensure the health of the force, and support the deployment and sustainment of properly tailored medical force packages that were capable of supporting military operations across the full spectrum of conflict. Being ready within this broader context required the integration of both the AMEDD's TOE and TDA force structures, the active and reserve components, and our own activities with the medical departments of the other Services. It required a balanced approach to the integration of all initiatives relating to the AMEDD's six Imperatives and Battle Rules, as previously cited. Most importantly, it demanded that all AMEDD leaders - at every echelon within all organizations, in both active and reserve components - think and act together in a collaborative and mutually supportive manner to build and maintain the kind of fully ready medical force we required, from the FLOT back into and within the CONUS base.

THEME #2 - CUSTOMER FOCUS: We were committed to changing our institutional culture to make our customers the center of our attention, rather than ourselves, our facilities and our own operations. Such required being able to identify, respond to and satisfy customers' needs and expectations. It necessitated a far greater degree of understanding, attentiveness, openness, and receptiveness, and it mandated that we keep open an effective dialogue with all customers. It

required a genuine understanding of and commitment to the continuous application of TQM principles in all our endeavors, to ensure that we were constantly working to enhance the efficiency, effectiveness and quality of the services we provided. It required that we learn what it takes to be better competitors in the delivery of our services, so as to attract and retain customers because we are their health care vendor of choice, rather than of necessity or of only resort. We had to learn to be able to effectively compete with TRICARE contractors by being better at providing health benefits and services than they were.

THEME #3 - TEAM BUILDING: We were committed to the elimination of bureaucratic competition, parochialism and isolationism, and the building of a genuine team effort that horizontally cut across organizational boundaries. This required the building of learning organizations at all echelons in which voluntary associations would serve to promote involvement and participation, nurture trusting and collaborative relationships, contribute to the maintenance of constructive dialogue, and lead to the unobstructed sharing of experience, expertise and information across organizational boundaries.

OUR APPROACH TO TRANSFORMING THE AMEDD

The Army's senior leadership had challenged the AMEDD to critically reexamine every aspect of how it did business, and every relationship relating thereto. Traditionally, the AMEDD had described its health care delivery system as being a single, seamless one involving the integration of ten major medical functions: specifically, our traditional subsystems of hospitalization, evacuation, area medical support, medical logistics, laboratory, preventive medicine, combat stress, veterinary, dental, and command and control. This approach tended to focus more on functional systems than capabilities, at the expense of obscuring critical capability requirements that did not clearly fall into one of the ten functional categories, such as medical research and development or GME. Given the Army's philosophical shift from emphasizing systems to emphasizing warfighting capabilities (at all echelons, from FLOT to rear), the AMEDD reviewed what it does from the viewpoint of product lines and the essential core business processes associated with those product lines. That review resulted in our focusing on core business processes based on their value-added contributions within the broader context of total medical readiness and the provision of health services across the continuum of conflict and care. Those core business processes were subsequently defined as follows:

Graphic #43

There is a subtle, yet significant, difference in examining the AMEDD from the perspective of functional areas versus core business processes. The latter is more reflective of product line requirements that directly relate to essential AMEDD capabilities, ones that can be tied directly to the accomplishment of critical tasks that contribute to medical readiness in the broadest sense. Transforming into the future around these core business processes and the specific product lines respectively relating thereto, was what the AMEDD needed to be doing, under a comprehensive plan of attack.

Under the leadership of its new Surgeon General of the Army, LTG Alcide M. LaNoue, the AMEDD undertook in 1992 a critical and candid assessment of its posture in light of the challenges arising from the fundamental transformation that was seen to be occurring in the Army. That assessment contributed to the codification of a future vision for the AMEDD.

VISION OF AMERICA'S AMEDD

A WORLD CLASS SYSTEM...

FOR TOTAL QUALITY HEALTHCARE IN SUPPORT...

OF AMERICA'S ARMY AT HOME AND ABROAD...

ACCESSIBLE TO THE TOTAL ARMY FAMILY...

ACCOUNTABLE TO THE AMERICAN PEOPLE.

The AMEDD concurrently embarked upon four, interrelated campaigns to boldly confront the challenges that had to be met in bringing its future vision to fruition. Those four campaigns were identified as being and were intended to:

- Improve Business Practices
- Reorganize the AMEDD's TDA Force (and its infrastructure)
- Reengineer the AMEDD TOE Force
- Leverage Information Age Technology.

These four campaigns, and the specific efforts and initiatives associated with each, are mutually supportive. They continue to provide the banners under which we are marching into the future. In the period since the Gulf War, the AMEDD has accomplished a great deal in strategically realigning itself to deal with the future. Our movement from where we were, to where we are now, and towards where we need to be in the future has involved multiple initiatives along numerous avenues of approach in support of our major campaigns. No single initiative we have undertaken to date can be seen as unilaterally defining the direction of our movement, for they have all been interrelated and mutually supportive within the context of our vision and the transformation of the AMEDD to bring that vision to fruition. The transformation, which continues to proceed, will not be characterized by arrival at some specific point in time or at some definable end state at which our work will have been completed. It constitutes a "journey...not a destination." The uncertainty, instability and dynamism of the strategic environment requires that we be able to recognize and adjust to new challenges and opportunities as will invariably unfold. We have, however, set our azimuth to the target as we presently see it, and have already fired the round in that direction. Unfortunately, the target is a moving one, and we do not know with certainty exactly where it is going to be located at specific points in time. In this regard, the AMEDD must act like a smart munition, able to adjust its trajectory while enroute to accommodate the target as it shifts, so as to be able to hit it at any point along the trajectory to the future.

Graphic #31

It is worthy of note that three of our four campaigns as initiated in the early 1990's presaged and now parallel the three axes of advance along which the Army has subsequently embarked on in its movement towards FORCE XXI. The AMEDD was, in many respects, the bow wave of the Army's transformation. We had effectively anticipated the need for change and the major components involved in its accomplishment, and we had embarked on that journey before most elements in the Army had begun to do so.

These changes were not undertaken for the sake of change; nor were they designed simply to create a smaller organization. An organization is not made better by making it different, or by making it smaller; it is made better by making it better. *Better is Better!* This AMEDD reorganization has been a purposeful effort to create a better organization emphasizing high-quality health care service, readiness, and cost considerations... The Army medical community has sensed the winds of change - and has harnessed them.

General Gordon R. Sullivan, CSA, USA

This volume will not attempt to address all the specific actions and initiatives we have undertaken to date, but will focus on the principal ones that are of the greatest import. Comments relating to such initiatives will be grouped into four categories that parallel our four campaigns, with a final category being added that addresses the area of medical readiness.

REORGANIZING THE TDA AMEDD

The command and control infrastructure of the AMEDD at the time of the Gulf War had already proven itself to be antiquated in light of force reductions and new challenges. It was encumbered by multiple levels of hierarchy in which missions and functions often overlapped, unnecessary duplication of effort was encountered, operational voids existed, and inefficiencies were present. Responsibility and authority were not always clearly defined or aligned, contributing to the proliferation of bureaucratic processes, parochialism and confusion. Work relating to strategic, operational and tactical levels of planning and execution were mixed at multiple echelons, often resulting in conflicting, counterproductive and confusing guidance. Health Services Command (HSC), with some 37 subordinate MTF's reporting directly to it, was faced with an unmanageable span of control, in which Medical Centers (MEDCEN) tended to receive a disproportionate share of attention and resources. The approach to management of MTF's was highly centralized and tightly controlled via regulatory guidance, stifling innovation and flexibility, and leading to a situation in which there was a tendency among MTF's to simply await the receipt of instructions from HSC.

Graphic 34

In 1993, Task Force Aesculapius (TFA) was chartered by TSG to conduct an objective and comprehensive evaluation of the AMEDD's TDA infrastructure. The major task of TFA was to propose a major realignment of the AMEDD infrastructure to provide for a smaller, more streamlined and flattened organization that promoted the accomplishment of the right work at the right levels by the right people. The organizational design principles employed by TFA were predicated on stratified systems theory, in which a systematic approach was employed to develop organizational structures in light of the kinds of work that needed to be done at various levels and the attendant business processes for getting it done. The charge to TFA was to formulate specific recommendations for an organizational infrastructure that served to focus on customers, orient on core business processes and product lines, establish clear lines of authority and accountability, and emphasize the placement of strategic, operational and tactical levels of work at appropriate echelons within the AMEDD.

Based on TFA recommendations with some modifications thereto, the Army approved in 1994 a major reorganization of the AMEDD as proposed. Major structural components relating to the reorganized AMEDD included:

- OTSG (Office of the Surgeon General)
- MEDCOM (United States Army Medical Command)
- HSSA (Health Services Support Area), of which there were seven
- DENCOM (United States Army Dental Command)
- VETCOM (United States Army Veterinary Command)
- AMEDDC&S (Army Medical Department Center and School)
- MRMC (United States Army Medical Research and Materiel Command)
- CHPPM (United States Army Center for Health Promotion and Preventive Medicine).

Under the reorganization, OTSG has been reduced from nearly 600 to about 100 personnel, and has refocused its attention and activities on fulfilling Title 10 obligations, advising the Army

Secretariat and the Chief of Staff (CSA) on medical issues, and formulating broad medical policies for the Army and the AMEDD.

Under the reorganization, MEDCOM has emerged as the focal command and control element for the AMEDD, in charge of a single medical infrastructure and bearing responsibility and accountability for accomplishment of the entire medical support mission. As the center of gravity for AMEDD planning and operations, it has absorbed multiple functions previously performed by OTSG, along with the directive authority to manage those functions. It orients on strategic-level business planning functions and activities, and provides overarching direction regarding the integration of the efforts of its Major Subordinate Commands (MSC). Succinctly stated, it bears responsibility for allocating resources, analyzing utilization, and assessing performance on a world-wide basis.

Graphic #35

A detailed review of each of the respective MEDCOM MSC's relative to their respective missions and functions, and their attendant roles and responsibilities, will not be addressed here, as to do so would result in an extensive narrative. Such information, if desired, can be obtained from MEDCOM Regulation 10-1. Several points, however, warrant attention, especially with respect to the HSSA's, CHPPM and MRMC.

The HSSA's represent a new way of conducting business within the AMEDD. Each serves as the integrator of medical support services within its respective geographical area of responsibility, translating MEDCOM strategic guidance into operational-level planning guidance that will better serve to address and meet the needs of all eligible beneficiaries residing within its geographical area. It serves as the regional command and control element for supervising and integrating the efforts of subordinate MTF's in providing for cost-effective, customer-focused and high-quality medical services. As such, it distributes and reallocates resources, analyzes utilization, and assesses performance of all MTF's throughout its region. In addition, it assists in coordinating support for and integration of reserve component units within the region, to enhance their medical readiness posture. In turn, the subordinate MTF's of the HSSA now focus on translating operational guidance into specific, tactical-level plans and actions, at the points of service where health services support is actually delivered. Achieving this result is one way in which we are going to be better able to deal with reduced resources and lower our costs of providing care.

In the AMEDD command and control structure the HSSAs will do most of what the old HSC did. HSSAs are not a building but a way to put actions, decisions and responsibility closest to the customer - the Army.

LTG Alcide M. LaNoue, The Surgeon General, USA

The CHPPM was established to provide a focal point for managing all efforts relating to the enhancement of medical readiness through the integration of all health risk reduction, health promotion, and preventive medicine activities, on a worldwide basis. Through its efforts in these areas, it offers the potential for substantially reducing demand for and the resultant costs of acute, episodic care, through the maintenance of a healthier beneficiary population.

The MRMC was created as a MEDCOM MSC through the consolidation of the former Medical Research and Development Command and a number of other AMEDD activities, primarily the United States Army Medical Materiel Agency (USAMMA) and the United States Army Health Facilities Planning Agency (HPFA). It now constitutes the single entity for planning, managing and integrating the total medical research, development and acquisition effort in support of the AMEDD. This provides for the more effective reviewing, assessing, and leveraging of advanced technologies that will serve to enhance AMEDD capabilities and readiness. Achieving this is one way in which we are going to be better able to extend our reach, increase access, improve the quality of care, and be prepared to accomplish our mission.

The schematic below provides a succinct overview of the reengineered command and control structure of the AMEDD's TDA force. In MEDCOM, there has been established a clearly defined center of gravity for the AMEDD in providing for an effective, unified response to external agencies. The reorganization has more clearly focused attention on the AMEDD's core business processes and product lines, and increased our ability to maintain essential medical support capabilities despite resource reductions. It has contributed to a streamlined command and control structure that provides for the delineation of specific functional roles and responsibilities, and the establishment of clear lines of responsibility, authority, and accountability; this has served to eliminate unnecessary duplication, functional overlaps, inefficiencies, and operational voids. It has sliced and focused the strategic, operational, and tactical mission tasks among the respective echelons of the AMEDD at which they can best be managed and accomplished. Through establishment of the HSSA's as readiness integrators and enhancers, it has created the medical projection platform for improving the readiness posture of the total AMEDD force, and enhanced the AMEDD's ability to support the power projection of forces. It has more clearly focused our attention on the responsive servicing of our customers, both inside and outside the Army, and provides for the management structure to ensure the provision of cost-effective, accessible, and high-quality care. It provides the mechanism for our building and maintaining viable learning organizations at all echelons, in voluntary associations that promote teamwork through collaboration and sharing. With the dual-hatting of TSG as the

MEDCOM commander, there has been a clarification of the chain of command that has resulted in a more unified, purposeful, and cohesive AMEDD organization. In short, the reorganization has enabled us to do a better job in the present, and postures the AMEDD to better deal with the future and the challenges it will bring.

Graphic #33

REENGINEERING THE TOE AMEDD

The AMEDD has already begun the process of designing a medical force structure of the future through its Medical Reengineering Initiative (MRI). That effort parallels the Army's "Joint Venture" axis of movement to FORCE XXI, which involves the complete reengineering of the Army's TOE force structure to provide for a smaller, but capable and ready, power projection Army of the future.

Our MRI efforts focus on the complete review and revision of the medical force, in light of the AMEDD Battle Rules and the six Imperatives associated with the force integration process as it pertains to Doctrine, Training, Leader Development, Organization, Materiel, and Soldier Support (DTLOMS). The principal design considerations as are applicable to the MRI relate to the development of TOE medical units and force packages that are highly flexible, tailorable and deployable. Additionally, the force as designed is to be capable of supporting a power projection Army in joint and combined operations, as well as be adaptable to support Operations Other Than War (OOTW).

We are participating in Army-sponsored Advanced Warfighting Experiments (AWE) and Advanced Technology Demonstrations (ATD) to identify and assess modernization initiatives that will leverage both advanced concepts and technologies for supporting FORCE XXI, from Level I (Unit) through Level II (Division) to Level III (Corps). Some of our Level I experimental issues relate to employment of a new armored ambulance, Personal Status Monitors (PSM), and telemedicine (still image) from the Battalion Aid Station (BAS) to the Forward Support Medical Company (FSMC). Level II initiatives include telemedicine (full motion video linkages, Levels II to III), digital logistics resupply, and employment of enhanced far-forward Forward Surgical Teams (FST). Our primary Level III initiative relates to the development of a lighter and more readily deployable 84-bed Combat Support Hospital (CSH) that is fully digitized. Such initiatives are being assessed in light of measurable "value added" criteria regarding their contributions to enhancing capabilities and readiness versus simply fielding new equipment or systems because they are available.

Our MRI efforts to date have resulted in a reduced medical footprint on the future battlefield as is currently projected to exist, with our force structure having been collapsed from 34 type medical units under the AMEDD's Medical Force 2000 (MF2K) force structure to 26 type medical units under the AMEDD's emerging FORCE XXI force structure.

Another aspect of the MRI is an initiative involving, in conjunction with the other Services' medical departments, development of a joint version of the Army's force integration process model (DTLOMS) for identifying and addressing capability requirements in the joint medical arena. Our effort in this regard reflects our appreciation of the need to promote tri-service interoperability and sharing as we reengineer the AMEDD's TOE force structure.

Lessons learned from the Gulf War indicated serious deficiencies relating to the evacuation, tracking and regulating of battlefield casualties. It confirmed our concerns that the greatest impediment to total medical force readiness for the near term is our capability to rapidly clear the battlefield of casualties, a problem that will only be exacerbated under Third Wave Warfare battlefield conditions. We are working with the Air Force to reassess, if not restructure, the medical evacuation system, so as to provide for responsive and timely clearing of the battlefield.

We are also assessing the potential for new operational concepts that would serve to reduce the size of a deployed force through increased provision of support services directly from the CONUS base, under a "split-based operations" construct. Such has substantial applicability in the area of Single Integrated Medical Logistics Management (SIMLM) support to the Army and, under executive agent proponentcy, to the medical departments of the other Services. Similarly, the potential exists for employing split-based operations in other medical support areas, such as the provision of epidemiological and environmental health services to deployed forces.

Our relatively new "Caretaker Hospital" concept integrates the TDA and TOE structures by providing for a greater field medical support structure at reduced levels of staffing. The caretaker hospital is fully equipped but only partially staffed by a relatively small cadre of organically assigned personnel; when required for deployment, the remainder of the unit's staffing

complement comes from the supporting MTF, with the MTF being backfilled by reserve component personnel. We know this concept works and perhaps needs to be expanded under the MRI. It serves to illustrate that the lines between pure TOE and TDA, and between the active and reserve components, have become less rigid, and that the MRI needs to be accomplished within the broader context of the total AMEDD force.

Many of our MRI efforts are still in the formative stage, pending further experimentation and validation through simulations and AWE's/ATD's. The significant point is that we have recognized TOE force capability shortfalls associated with our older MF2K force structure and doctrine, and are aggressively moving through the MRI to redesign and field a TOE medical structure capable of supporting a power projection Army under emerging FORCE XXI warfighting concepts.

LEVERAGING INFORMATION AGE TECHNOLOGY

The Army Digitization Office (ADO) constitutes the Army's third axis of advance towards the development of FORCE XXI. Simply put, the ADO focuses on the leveraging of a broad range of Information Age technologies to digitize the battlefield so that it can be seen and controlled, and to provide our power projection Army with leap-ahead warfighting capabilities.

Medicine has always been an information-based system. The accuracy of a diagnosis and the effectiveness of a treatment plan directly relate to the quantity and quality of information that can be obtained about a patient's condition - from the patient, from historical records, through subjective examination, from diagnostic tests, etc. Medical providers have a significant interest in capitalizing on such technologies as may serve to enhance the quality and quantity of useful information with which they have to work. Information flow, however, is no longer a one-way street on which everything flows only to the provider of care. Our increased emphasis on health and wellness, preventive care, and self-care presumes a greater involvement on the part of beneficiaries, and their assumption of a greater degree of responsibility regarding their health status. They have to be made knowledgeable about how to avoid disease and injury, how to treat themselves effectively at home if possible, how to avoid the expense and personal inconvenience of unnecessary clinic visits, and how to better recognize and deal with medical problems before they get out of hand. This is one of the ways in which we are going to be able to conserve our limited resources, by better controlling the over-utilization of health care services. We have, therefore, a responsibility to get the right kind of information out to our beneficiaries, in a timely manner, and in a form they can understand and use. Our health care information management "system," therefore, needs to involve substantially more than just the application of automation hardware and software to our own medical operations in the clinical environment or on the battlefield. It needs to provide for:

... a holistic system wherein each individual and relevant provider has total access to accurate information, knowledge and wisdom to allow enlightened self-care and to intervene with specialty care when necessary, anytime, anywhere.

LTG Alcide M. LaNoue, The Surgeon General, USA

In early 1994, we conducted a critical and comprehensive self-assessment with respect to the effectiveness of our efforts to fully leverage Information Management (IM) technology within the AMEDD. That review indicated the presence of some significant problems, the foremost of which were that we lacked a meaningful strategic IM vision, and had an inconsistent and ineffective IM organizational structure. To provide overarching direction in our effort to address and resolve the issues and problems identified through our review, we established Task Force Mercury (TFM) and gave it a broad and multi-faceted charter. Under that charter, it has been working to develop a truly global concept of IM doctrine for the AMEDD that spans and interfaces both the TOE and TDA environments, and supports the development of seamless communications linkages between far-forward medical elements on the battlefield all the way back to MTF's in the CONUS base. It has been involved in designing and implementing an IM organizational structure that will be fully supportive of both corporate and end-user needs at all echelons. It has been reviewing and determining how our IM business processes should be aligned more closely with our core business processes, and identifying impediments to our achieving an effective and efficient IM capability. It has been examining ways in which to infuse the appropriate kinds of IM training into our various training programs, so as to provide AMEDD personnel in all components with the requisite levels of IM knowledge and an understanding of how to apply that knowledge. We appear to be on our way to resolving the IM problems that were identified, and are proceeding toward development of a sound IM architecture, organizational infrastructure, and plan of action that will better serve the AMEDD's needs.

We have established the Center for Total Access at Fort Gordon, to assist the AMEDD in fulfilling its role as DOD's executive agent for the application of telemedicine technology. Its broad charter is to explore how to expand the reach of health care providers in support of both deployments and peacetime operations, and specifically to "facilitate healthcare delivery using advanced medical, communications, and information technologies so that all Army, Navy, and Air Force patients will have quick and convenient access to appropriate health care."

Under the broad umbrella of the AMEDD's Medical Communications for Combat Casualty Care (MC4) program, we have been involved in multiple initiatives to exploit specific advanced technologies to provide us with leap-ahead capabilities regarding the provision of health care on the battlefield and within the peacetime environment.

MC4 INITIATIVES

Medic Telementoring (Hands-free Voice Communication)
Teleconsultation (Voice, Data, Still Image, and Full Motion Video Communication)
Personal Status Monitor (PSM)
Medical Digital Assistant (MDA)
Life Support, Trauma and Transport System (LSTAT) (Also Known As TRAUMAPOD)
Mobile Medical Mentoring Vehicle (M3V)
Digital Field Medical Treatment Facility (DFMTF)

Under the heading of Teleconsultation, we have been especially active over the past several years, involved in multiple projects to demonstrate and validate the value-added benefits of telemedicine. Using Commercial-Off-The-Shelf (COTS) technology, telemedicine provides the capability to link far-forward medical personnel with physicians and other specialists anywhere in the world, anytime - from foxhole to MEDCEN. We have repeatedly employed telemedicine, with consistently outstanding results, in support of numerous actual deployments - in Zagreb, Macedonia, Haiti, Guantanamo, Somalia, and the Pacific Basin. We have conducted similar pilots and demonstrations involving telemedicine linkages between MTF's and geographically removed clinics and medical staffs. We know that telemedicine can significantly extend our reach and enhance our capability to provide responsive and quality health care services in support of diagnosis and treatment.

Telemedicine offers potential for use in a host of medically related areas not directly related to treatment, such as the collection of epidemiological survey data and the conduct of environmental hazard field surveys. It can provide the means for effectively educating beneficiaries, from offering general medical information to providing specific "how-to" self-care instructions and techniques. Beyond the value-added benefits telemedicine offers the AMEDD, it also has tremendous potential for application within the civilian sector, especially with respect

to providing practitioners in remote area with access to extensive medical expertise on a real-time basis.

We know telemedicine works and works well; we know how much of an impact it can have; and, we know that we must exploit and incorporate it to the maximum extent possible in both the TOE and TDA environments.

I am certain that if we had had telemedicine in Vietnam, there would be far fewer names on The Wall at the Vietnam Memorial today. I am determined to keep as many names as possible off future walls.

LTG Alcide M. LaNoue, The Surgeon General, USA

A specific example of how the AMEDD can leverage technology to identify and locate Soldiers who are in medical distress is the Personal Status Monitor (PSM), which monitors vital signs and will automatically transmit information relating to the Soldier's location and medical distress. We are currently using prototypes of the PSM in Ranger training, to preclude a repeat of the tragedy in which four Ranger candidates died from hypothermia following a night of training in a Florida swamp.

Technologies such as telemedicine and the PSM are but two examples of many that serve to demonstrate the opportunities presented by advanced Information Age technology, and how it will serve to enhance our ability to reach out to both prevent and treat medical problems as may befall our Soldiers in the most remote of areas. They represent capability and readiness multipliers that we have yet to fully exploit, but are working diligently to do so.

IMPROVING BUSINESS PRACTICES

We have shifted to a capitated funding system, wherein an MTF commander is allocated a fixed amount of funding per beneficiary supported, based upon a defined beneficiary population to which health services are being provided. The MTF commander has, within the total funding so allocated, considerable latitude to expend those funds in what is deemed to be the most appropriate, effective, productive, and cost-efficient manner. The total amount of funding received remains the same, regardless of workload. In this regard, the financial incentive to artificially "pad" workloads through unwarranted admissions, excessive hospital stays, and the provision of unnecessary services is eliminated. The financial incentive lies in providing beneficiaries with, and encouraging their use of, more cost-effective services, such as primary care, outpatient surgery, preventive medicine services, etc. The financial incentive lies in identifying and applying more efficient ways of doing business. Capitation empowers the MTF commander in that it provides for a relatively stable business environment, delegates authority to make decisions in light of local requirements, and allows the flexibility to organize and operate in response to local circumstances. It places the onus on the MTF commander, however, to more closely manage utilization and performance, more effectively monitor and control expenditures, make prudent decisions regarding the types and mix of services offered, and actually manage the operation. It also requires the MTF commander to be more attentive to the concerns, expectations and perceptions of the beneficiaries being served, and to better educate them regarding their increased roles and responsibilities under a managed care approach to health care delivery. With the empowerment, operational flexibility, and decision-making latitude comes the responsibility for insuring the consistent provision of accessible, high-quality and cost-effective care, for which the MTF commander now bears ultimate responsibility and accountability.

We have made significant strides in implementing managed care concepts and practice through our Gateway to Care program, demonstrating an ability to control costs while at the same time increasing access and maintaining quality. We provide care at the least cost per beneficiary of the three Services, and at a cost significantly less than that experienced in the civilian sector. In

these respects, we have positioned the AMEDD to transition into DOD's TRICARE program, and do our part in promoting its effectiveness and success. Based on experiences gained to date through Gateway to Care and capitation funding, our MTF's are better prepared to effectively compete in attracting and retaining beneficiaries. To remain competitive and be viewed as vendor of choice by beneficiaries, we have to ensure that the benefits and services we provide serve to meet beneficiary needs, are accessible, and are of high quality. The Military Health Support System (MHSS) and the AMEDD are inextricably linked to the success of the TRICARE program. We, and the other Services, must contribute to the containment of costs if the MHSS is to remain as a viable health care delivery system. One of our biggest challenges over the next few years will be to learn how to more effectively market the TRICARE program. We have greatly increased our customer focus, but we must continue in our efforts to engage beneficiaries as partners and collaborators, better educate them as to their increased roles and responsibilities, and provide them with the necessary information and motivation to become more actively involved in promoting their own health. We have substantially shifted our paradigm regarding how we deliver care, but we must do more to promote the powering down of responsibility, control, and accountability to institutionalize the new paradigm.

We have instituted numerous programs to control costs and improve support service responsiveness, and we are beginning to see the results of our efforts. The Pharmacoeconomic Center (PEC) was established in 1993 as a corporate initiative to gain control over a steep trend upward in pharmaceutical expenditures, and has proven successful at doing just that. In FY 94, pharmacy expenditures were reduced by 16%, or some 37 million dollars. Our Pharmaceutical Prime Vendor program has radically reduced the order-receipt time since it began operation in FY 93, from 30 - 45 days to a routinely experienced period of 24 hours; this has contributed to an aggregate reduction in warehouse inventories of 62%. Our Prime Vendor program as relates to medical/surgical supplies has resulted in expedited deliveries and vendor payments, and has served to reduce inventory investments, warehousing requirements, supply destructions and disposals, and staffing levels. We are in the process of developing a split-based medical logistics (MEDLOG) capability, wherein the CONUS base serves as the power projection platform from which MEDLOG support emanates in support of deployed forces. Once fully implemented, this

capability will enable us to reduce the MEDLOG footprint within operational areas of employment, yet enable us to maintain a reliable and time-sensitive response capability to meet customer needs. Such proactive programs and innovative initiatives are serving to reduce the overall costs of health care and force structure requirements, without sacrificing responsiveness or capabilities.

We have been involved in a major initiative under the Leadership Development Decision Network (LDDN) process to establish branch-immaterial leadership positions for AMEDD officers - in TOE units; in TDA units; and, at the General Officer level. The philosophy underlying that effort relates to providing for an equal opportunity for those who are best qualified to occupy key positions within which their skills and abilities could be more fully utilized to the benefit of the AMEDD. To better prepare our officers to be so qualified, we have developed and implemented a new Leader Development Action Plan (LDAP) as part of our overall LDDN effort. The status of our LDDN efforts have been briefed at the Chief of Staff Quarterly Leader Development Update sessions since 1994. While the final resolution of our initiative in the LDDN arena remains to be seen, our commitment to the AMEDD's use of its best and brightest people in the most effective ways remains constant. We must be able to draw from among those best and brightest if we are to continue to improve on our business practices to support the AMEDD's becoming a world class provider of care.

The AMEDD Executive Skills Technology Center (AESTC) that opened in 1995 provides a truly high-tech facility that is illustrative of the kind of classroom that will be required in the future. Employing computer, telecommunications, audio/video display and television technologies, it is designed to facilitate the use and transfer of knowledge and information relating to the development of planning, decision-making, and executive skills. It constitutes the AMEDD's prototype classroom of the future that will serve to link the training institution with units in the field and support the delivery of distributive training on a global basis. It serves to demonstrate that the AMEDD has already begun to apply emerging training technologies of the sort that will be required to accommodate Third Wave training requirements in the future.

We have been working diligently to eliminate parochialism and bureaucratic competition within the AMEDD, and to promote team-building. We have shifted to a new paradigm under which we are learning to work together in voluntary associations that nurture trusting, collaborative relationships and promote the open sharing of knowledge and expertise. We are encouraging our people at all echelons to participate and contribute in a candid and constructive dialogue that will serve to illuminate new ideas, stimulate intellectual growth, and promote the achievement of common goals. The quarterly AMEDD Board of Directors meeting, consisting of the MEDCEN and MSC commanders, provides the forum for candidly participating in discussions of strategic issues that are of import to the entire AMEDD, and to build consensus through participation in the making of key decisions. Our quarterly AMEDD Senior Executive Council (ASEC) brings together our two-star General Officers from both the active and reserve components of the AMEDD, to deliberate and collaborate on strategic policy recommendations, and insure the horizontal integration of efforts across command boundaries.

We have increasingly employed task forces, ad-hoc working groups, and Process Action Teams (PAT) for drawing together groups of individuals to work together in dealing with important issues, challenges, and needs on an inter-disciplinary basis. Task Force Aesculapius, Task Force Mercury, and the Enabling Care Process Action Team (ECPAT) represent but a few of the many examples of such groups.

A central goal of TSG has been the conduct of frequent, wide participation conferences via Videoteleconferencing (VTC), with the objective being to achieve greater levels of integration regarding critical issues. Utilization of VTC's has increased dramatically, as appreciation has grown for the need to maintain interfaces and information flow. Use of the AMEDD's electronic mail as a mechanism for maintaining timely communications has demonstrated a similarly dramatic increase. The shift to greater use of VTC's and electronic mail to conduct business has resulted in major reductions in costs associated with travel and productive time lost while in travel status. All these point to the fact that the collective AMEDD organization is beginning to function along the lines of a "virtual organization," which is not fettered by time, geography, or hierarchy; we are moving to the realization of an open information network that permits access

by anyone to the information as may need it, anywhere and anytime. We are, indeed, moving toward our goal of becoming a learning organization.

These initiatives do not constitute the sum of our efforts as related to improving business practices within the AMEDD. As a representative sample, however, they serve to clearly convey the message that the AMEDD has responded to changing circumstances by changing how it does business.

ENHANCING READINESS OF THE TOTAL MEDICAL FORCE

In some respects, many of the initiatives undertaken by the AMEDD to enhance readiness within the total medical force relate to the application of improved business practices. The issue of AMEDD readiness, however, is of such import that it warrants being addressed as a separate category.

The MRI effort and the leveraging of Information Age technology, as previously addressed, will serve to improve medical force readiness by enhancing the AMEDD's Combat Health Support capabilities on the battlefield. Inherent to the TRICARE program was the expectation of medical force readiness improvements by promoting a healthier force through emphasis on wellness, health promotion and preventive services, by providing for continuity of health care during mobilization and deployments, by preserving a viable medical training platform, and by supporting recruitment and retention. Over time, these factors will contribute to enhanced readiness.

Traditionally, the relationship and interaction between reserve component units and the MTF's of HSC was poor. The MTF's had no formal requirement or authority to become even tangentially involved in the affairs or concerns of most reserve component units, and typically had no interest in doing so. Lessons learned during the Gulf War, however, indicated that serious problems existed within the reserve components that needed to be rectified if they were to be ready to accomplish their wartime missions.

In 1995, a Memorandum of Understanding (MOU) was completed among MEDCOM, the United States Army Forces Command (FORSCOM), and the United States Army Reserve Command (USARC) that formalized the basis for HSSA involvement in the provision of clinical and technical assistance to reserve component units of the USARC, assistance that would serve to improve their medical readiness postures. The MOU identified 15 specific mission areas in which each HSSA was to be so involved, some examples of which include annual training (AT) medical site support, reviewing providers' credential files, making opportunities available for

education and training, and assisting in coordinating the repair and calibration of medical equipment.

Under the reorganization of the TDA AMEDD, a HSSA was assigned multiple roles and responsibilities, but identified as being the top priority among them all was the business of maintaining liaison with both active and reserve component TOE units, with the objective being to increase their medical readiness. The HSSA was charged with responsibility for monitoring the medical readiness posture of both categories of units within its geographical area, and for providing the clinical and technical assistance to reserve component units as outlined in the MEDCOM/FORSCOM/USARC MOU. While there still remains much to be done, there has been progress made to date in improving the staffing, training, and equipment posture of reserve component units.

We have instituted a TDA Unit Status Report (USR) for MEDCOM and its subordinate units that reflects for each unit the status of trained Professional Filler System (PROFIS) personnel, the ability to provide installation and deployment support, and the ability to meet mobilization requirements. The TDA USR process within MEDCOM provides a measure for assessing the command's ability to transition to war.

The medical readiness posture of the AMEDD's total force - both TOE and TDA, and both active and reserve - currently enjoys an unprecedented level of visibility and attention, at all echelons. Coupled with a far greater degree of collaboration and cooperation by all concerned stakeholders, we will continue to make substantial progress towards ensuring that the AMEDD is ready to do what it is called upon to do, anywhere and anytime.

CLOSING COMMENTS

We can be justifiably proud of what we have accomplished since the decade of the 1990's began.

We have repeatedly "been there" whenever and wherever we were needed by the Army, from the Gulf War to a host of other deployments involving humanitarian and OOTW missions, and we have not missed a beat in continuing to provide accessible, high-quality care to our beneficiaries at home.

We have undergone a major paradigm shift in our philosophy and approach regarding the delivery of health care services, evidenced by our successful incorporation of managed care concepts, TQM principles, and a customer-focused orientation. We have demonstrated our ability to contain health care costs through far more cost-effective operations, and we have not missed a beat in continuing to provide accessible and high-quality care to our beneficiaries, worldwide.

We have affected a fundamental reorganization of the AMEDD's command and control structure in light of our core business processes and products, and have provided for clear lines of responsibility, authority, and accountability. We have empowered our MTF commanders to run the tactical operations of the AMEDD and given them the reins of control over what is done down where our customers actually are, and we have not missed a beat in continuing to provide accessible, high-quality care to our beneficiaries -- care that is now being provided in a far more cost-effective manner.

We have provided for an infrastructure that is smaller, less authoritarian and hierarchical, and less bureaucratic, serving to eliminate duplication of effort, functional overlaps and operational voids. We are making demonstrable progress in creating a total-team effort and building a consortium of learning organizations, characterized by the forming of voluntary organizations within which openness, trust, collaboration, and sharing are the norms. We have gotten smaller

but we have gotten better, and we have not missed a beat in continuing to provide accessible, high-quality and cost-effective care to our beneficiaries.

We have made progress in reengineering our TOE medical force to make it smaller, yet retained those essential capabilities as are required to support a power projection Army and ensure the provision of responsive Combat Health Support to Soldiers. We have already begun to capitalize on advanced technologies in the areas of telemedicine, communications, and automation that are serving to produce positive benefits, and we are aggressively pursuing a program for leveraging Information Age technologies to the maximum extent possible.

We have significantly improved our business practices in a host of areas, enabling us to be more efficient and effective at what we do, and serving to ensure that our limited resources are managed in a fiscally responsible manner so as to produce the maximum value-added benefit.

All of these undertakings have served to enhance our readiness and, in conjunction with the numerous readiness-specific initiatives we have implemented, will better enable us to do what we need to be able to do as the AMEDD, anywhere and anytime.

We have truly been busy in the most productive and positive sense of the term, and have consistently been setting the example for others to follow. We have postured ourselves to handle the larger transformation of the AMEDD that remains to be accomplished.

As the first FORCE XXI major Army command, we have...positioned ourselves to remain ahead of the power curve by employing modern management techniques, incorporating state-of-the-art technology, and reengineering ourselves into an efficient and effective organization.

LTG Alcide M. LaNoue, The Surgeon General, USA

We can not, however, afford to stop and rest, or even to slow down. The challenges that still remain to be faced are significant, and we must continue to rise to meet those challenges in a proactive, innovative and decisive manner.

Who could have imagined five years ago that in 1995, American forces would be in Hungary to join Russian allies for a peacekeeping mission in Bosnia.

LTG Alcide M. LaNoue, The Surgeon General, USA

We have a defining vision of our future and are working to bring it to fruition, but we must ensure that our efforts in the pursuit of that vision are in consonance with what others in the Army, and in key external agencies, are attempting to do within their respective spheres.

Hence, to Volume II.

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FOREWORD

This is the second of three complementary volumes constituting a White Paper that articulates "The Future Vision of the Army Medical Department (AMEDD)." The principal thrust of each of the respective volumes is as follows:

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|-------------------|--|
| VOLUME I | AMEDD OF THE PAST AND PRESENT (FY 96 AND BEFORE)
Provides an historical overview of the events and influences that have compelled the AMEDD to begin a fundamental transformation in order to strategically align itself for the future in light of its future vision. |
| VOLUME II | THE AMEDD OF THE NEAR TERM (FY 2003)
Analyzes the future visions and associated strategic planning references, studies, and guidance of the Army and other key external agencies to identify trends and factors impacting on the AMEDD's future vision. |
| VOLUME III | THE AMEDD OF THE FUTURE (FY 2010 AND BEYOND)
Creates a blueprint for bringing the AMEDD's future vision to fruition, consistent with what the Army and other key external agencies are proposing to do within their respective spheres. |

Every organization that embarks on the formulation of a strategic vision and plan must, of necessity, do so within the broader context of the operating environment that surrounds it and the various communities with which it is obliged to interact. Cognizance needs to be given to what others within those communities are doing or may be proposing to do in the future, as such could serve to directly or indirectly impact upon the achievement of the organization's own strategic goals and objectives. Similarly, what the organization envisions doing needs to be considered in light of its potential impact on others. The broader the view taken by an organization in looking beyond its own doors, the more likely it is that it can identify potential challenges, threats, and opportunities that might have otherwise been overlooked. Threats and challenges never seem to be in short supply. Opportunities, however, are less frequently encountered, and they tend to be fleeting in nature; once missed, they rarely resurface to provide for a second chance. It is the business of identifying and proactively capitalizing on opportunities that makes for success in virtually any endeavor. Review of the strategic visions and related plans of other elements within and external to the Army constitutes one way in which to identify opportunities.

THE RELATIONSHIP BETWEEN STRATEGIC PLANNING AND PROGRAMMING

The Government Performance and Results Act (GPRA) of 1993, Public Law 103-62, was enacted to promote management reform within the federal Government. It requires each "federal agency" to:

- (1) Develop and submit a strategic plan that covers a period of five years and is updated every three years. The plan is to include a comprehensive mission statement, general goals and objectives, and a description of how the goals and objectives are to be achieved.
- (2) Prepare an annual performance plan that is linked to and covers every activity in the agency budget, and that addresses objective and measurable performance goals, required resources, and measures of performance.
- (3) Submit an annual report of program performance that highlights success in achieving the previous year's goals, explains why any goals were not met, and evaluates the current year's performance plan.

Agencies are to comply with the GPRA provisions by September, 1997, with the strategic plan requirement being effective for Fiscal Year (FY) 1998, and the performance plan and annual report being effective for FY 1999. The Office of the Secretary of Defense (OSD) has indicated that it expects to initiate phased implementation of GPRA requirements in advance of the milestones as legislated.

Under the GPRA, the "federal agency" is the Department of Defense (DOD). The extent to which the Army and other Services may be required by DOD to prepare and submit stand-alone plans and reports has not yet been established. It can reasonably be expected, however, that the Services will be required by DOD, at a minimum, to provide the necessary input in some standardized format to enable DOD to extract what it needs to meet the requirements of the law as the accountable "federal agency." It is not unreasonable to expect that DOD will require the Services to submit stand-alone plans and reports, if only because of their size and complexity, and the resources they consume.

What is important to note is that the employment of meaningful strategic plans, performance plans, and performance reports is going to become a standard business practice within the federal Government and, by implication, throughout DOD. More importantly, those plans and reports are going to be linked to the budgeting process, which will serve to hold federal agencies more accountable for program results in light of the resources expended in their accomplishment. Most importantly, agencies are going to be forced to become more focused on outcomes as opposed to processes.

The processes and techniques relating to the business of strategic planning, performance planning, and performance assessment are not new to the Army. In a period of constrained federal resources, however, they will clearly become more important as visibility and oversight increase within DOD and Congress. In this regard, the Army will have to pay the same degree of attention to the application of sound business practices in its operations as to the maintenance of its core tactical competencies. It will have to be selective in funding proposed projects and activities, ensure that the ones selected are effectively and efficiently managed, and achieve the maximum return on each dollar allocated.

Within the Army, The Army Plan (TAP) of 1995 provides planning objectives and a degree of measurable planning guidance and is expected to satisfy part of any GPRA requirements as may be levied down to Service level. The importance of TAP can not be overemphasized, as it constitutes the essential linkage between strategic planning and programming efforts and serves to articulate the Army's priorities in light of anticipated resource levels. Beyond containing planning and resourcing guidance relative to preparation of the current (FY 1998-2003) Program Objective Memorandum (POM), TAP provides additional planning guidance covering a period of ten (10) years thereafter. It is almost a statement of fact that any proposed program initiative that was not considered under the POM development process and incorporated and funded (or at least identified as a validated unfunded requirement) in the resultant POM, is one that will not be considered for resourcing. As TAP provides the guidance for preparation of the full POM on a biennial cycle, it is essential that the key strategic planning initiatives of major Army elements be

submitted for consideration and incorporation into the applicable sections of TAP as it is being updated. This serves to establish the validity of those initiatives as Army-sanctioned requirements that will be competitively considered in the resource prioritization process. This critical step must be accomplished well before the biennial update and republication of TAP and the subsequent commencement of the biennial POM development cycle.

The strategic planning focus of a Major Command (MACOM) should serve to cover the applicable POM period and an additional period of ten years thereafter, characterized as the Extended Planning Period (EPP). In this regard, the FY 1998-2003 POM submission as is currently being finalized should involve a strategic planning horizon out to FY 2013, thereby covering a total of 16 years from the present. Since the POM is prepared and submitted on a biennial basis, the FY 2000-2005 POM should accordingly involve a strategic planning horizon out to 2015, the FY 2000-2007 POM a strategic planning horizon out to 2017, and so forth.

Projecting with certainty what the strategic landscape and related operational requirements might be some 16 years from the present state is, admittedly, not an exact science. It does, however, serve to anticipate and conceptually examine those significant trends (e.g., demographic and geopolitical shifts, potential scientific and technological breakthroughs, etc.) that harbor long-range challenges or opportunities to which cognizance needs to be given. Options, as they relate to dealing with any such challenges or opportunities that appear to be probable, or plausible, need to be developed and addressed in the MACOM's strategic planning process and its vision of the future. Any specific initiatives relating to those options that might be appropriate for implementation, especially those having substantial resource implications, need to be further developed and refined for subsequent submission to HQDA for review and approval as valid requirements within the context of the Army Long Range Planning Guidance (LRPG). Following validation of the requirement, it should be incorporated at the earliest point in time possible to a periodic update of TAP.

KEY PLANNING REFERENCES

A multitude of Army commands and agencies is involved in the preparation of strategic or long-range plans that have resourcing ramifications. There are few, if any, of those plans with respect to which the Army Medical Department (AMEDD) has little or no interest, as most address one or more initiatives or program activities that will inevitably serve to directly or indirectly impact upon some facet of the AMEDD's global operations. There are other DOD elements whose long-range plans contain guidance or initiatives to which cognizance must or should be given by the AMEDD, for example, the Medical Readiness Strategic Plan 1995-2001 (MRSP) as developed under the auspices of the Assistant Secretary of Defense for Health Affairs (ASD(HA)). There are yet other agencies external to DOD whose strategic visions or plans address matters of probable interest to or potential impact upon AMEDD operations, such as the Department of Veterans Affairs (VA) and the Food and Drug Administration (FDA).

Additionally, there are numerous source references that, in themselves, do not constitute truly strategic planning references but contain information or findings that need to be considered in the formulation or update of the AMEDD's strategic vision and plan. Examples of such source references are the TRICARE Lead Agent Guidelines, the Report of the Commission on Roles and Missions (CORM Study), various Government Accounting Office (GAO) reports, etc.

The challenge rests in identifying, assembling, reviewing, and assessing the contents of strategic planning documents and related references from all such sources, and ensuring that the ones obtained are current. In preparing this Volume, over one hundred such documents were collected and reviewed. That is, admittedly, not an exhaustive count. Some references that were desired were either not available or not releasable by proponent agencies, as in the case of the VA. Some references contained no additional information not already covered in other references from higher level authorities and were set aside. Appendix A provides the distilled listing of those principal references felt to be the most significant to the AMEDD from among the total number assembled.

In the course of collecting documents to be reviewed in support of this Volume's writing, several observations were made that are worthy of note for those individuals within the AMEDD who have roles to play in the development, review, or input to the strategic planning references of elements external to the AMEDD. First, a surprising number of unclassified Army and DOD materials collected are, in fact, readily accessible via the INTERNET and are therefore available to both the general public and interested AMEDD parties. Second, some of the documents retrieved via the INTERNET proved to be more current versions than the hard copies proffered by AMEDD points of contact (POCs). Third, updated versions of INTERNET-retrieved documents rarely noted what specific changes had been effected from previous versions, requiring a document-to-document comparison to identify what, if any, substantive changes had been made. Finally, some AMEDD POCs who had a role to play in the review of and input to a document update were not aware that it was under revision, and that a working draft of the revision could be obtained via the INTERNET.

These points serve to illustrate some of the issues relating to the trend towards a "paperless staffing" approach, in which review and coordination activities will increasingly be accomplished via computer linkages versus hard copy staffing through the mails. As that trend becomes more and more the norm, it can be expected to greatly increase the flow of information and pose a concomitant hazard for information overload, accelerate the frequency and speed with which coordination and staffing are accomplished, and contribute to the existence of "living documents" that are so frequently updated that they never reach hard copy stage. This requires that AMEDD planners identify the automated "loops" in which they need to be regular participants, know how to access those "loops," and keep abreast of what is happening by remaining "in the loop."

THE NATIONAL SECURITY STRATEGY

In response to the new threats and opportunities posed by the dissolution of the Soviet Union and the changing geo-political environment, the National Security Strategy (NSS) of 1995 identified

three central components of a broad strategy of engagement and enlargement. They are to sustain the Nation's security by bolstering its economic revitalization, promoting democracy abroad, and maintaining military forces that are ready to fight. The military component of the strategy envisions the selective employment of military forces in those situations in which our national interests and values are sufficiently at stake to clearly warrant their use. Any such employment of forces is to be based on clear objectives to which the Nation is fully committed and, when hostilities are likely, provides all the means necessary for those forces to achieve decisive victory over any adversary.

The NSS calls for the maintenance of robust and flexible military forces capable of accomplishing a variety of tasks, to include: deterring and defeating aggression in major regional conflicts; providing a credible presence overseas; countering the proliferation of weapons of mass destruction (WMD); contributing to multilateral peace operations when in the national interests; and, supporting counterterrorism efforts and other national security objectives.

To deter and, if necessary, defeat aggression, the NSS calls for the fielding of a military force capable of dealing with two nearly simultaneous Major Regional Conflicts (MRC) involving a coalition of hostile powers or a larger and more capable adversary than can currently be foreseen. Maintenance of a robust overseas presence is seen as taking several forms beyond the Cold War approach of permanently stationing large numbers of forces overseas. They include the use of pre-positioned equipment, rotational deployments and combined exercises, routine port calls and other force displays, and military-to-military contacts. Enhancing the defense capabilities of friends and allies is seen as lessening the likelihood of direct involvement by our own forces in conflict and, if such were required, would serve to place our forces in a relatively favorable situation.

The NSS calls for the preparation and employment of forces within the United States and in support of diplomatic efforts abroad directed against three key dangers to our national interests, specifically those posed by WMD, regional aggression, and threats to the stability of states. It articulates three basic categories of national interests which could warrant the use of our armed

forces. The first involves our vital interests relating to the security, survival, and vitality of the Nation. We would do whatever is required, on a unilateral basis if necessary, to protect those interests. The second involves situations in which our vital interests may not be directly threatened, but employment of forces would serve to advance our interests when other instruments of national power proved insufficient. The third involves primarily humanitarian interests, in support of which the unique capabilities of our armed forces could appropriately be brought to bear in a supportive rather than a combative role.

Any decision regarding whether and when to use military force is to be principally dictated by our national interests and made on a selective basis in light of the costs and risks being commensurate with the stakes involved.

Once made, the decision to employ U.S. forces will be based on specific guidelines as set forth in the NSS. First, those forces would be provided with a clear mission and objectives to be achieved, be appropriately tailored for the mission at hand, and be provided with the means to decisively win in those situations likely to involve combat operations. Secondly, we would seek the involvement of allies, friends, or relevant institutions to provide for a proportionate commitment on their parts in sharing the burden and the responsibilities. Finally, we would elicit and work to sustain the support of the American public in the unwavering achievement of the objectives as identified.

THE NATIONAL MILITARY STRATEGY

The National Military Strategy (NMS) of 1995 has been derived from the NSS and guidance from the National Command Authority (NCA). The NMS calls for a strategy of flexible and selective engagement. It emphasizes the ability of our forces to achieve the two primary national military objectives of promoting stability and thwarting aggression. The strategy and objectives are based on the strategic landscape and threat dangers that must be addressed by the defense establishment, which include: regional instability; proliferation of WMD; transnational dangers

(e.g., drug trafficking and terrorism); and, dangers to democracy and democratic reform in the former Soviet Union and elsewhere in the world.

Achievement of the two overarching national military objectives is seen by the NMS to require military forces that are capable of accomplishing a broad range of missions broadly grouped under the headings of peacetime engagement, deterrence and conflict prevention, and fighting and winning our Nation's wars through the application of the complementary concepts of overseas presence and power projection.

In consonance with NSS guidance, overseas presence is to be maintained not only through the permanent stationing of military forces abroad, but also through global pre-positioning, contingency operations, rotational deployments of a temporary nature, and a broad range of force displays and exercises. The drawdown and subsequent smaller size of forces permanently stationed abroad, however, requires a proportionate increase in our ability to rapidly project forces through the enhancement of our strategic mobility posture in the areas of airlift capabilities, sealift surge capability, afloat and ashore pre-positioning of heavy equipment, and improved readiness and responsiveness of the Ready Reserve Force.

Achievement of the two NMS objectives of promoting stability and thwarting aggression requires a military strategy that is intrinsically proactive, constructive, and preventive in nature, and is based upon employment of our military forces in light of the following principles:

- Set clear objectives and apply decisive force to achieve them.
- Project the necessary power to the theater of operations.
- Fight combined with allies and friends and jointly among the Services.
- Help dominate combat operations by winning the information war.
- Counter WMD through deterrence and improved ability to operate in contaminated environments.
- Initiate preparations to handle a second MRC at the outset of the first MRC to deter potential aggressors.

- Generate required forces by withdrawing from lower priority missions and mobilizing critical Reserve Component (RC) forces.
- Begin plans to win the peace at the outset of the conflict.

In response to situations anticipated to involve conflict, the NMS calls for land forces that are capable of deploying rapidly on a global basis and, if required, of executing forced entry operations. They are to possess the capabilities to dominate the battlefield throughout its depth and breadth, through the decisive application of synchronized maneuver and precision fires that enable them to maintain operational and tactical freedom of maneuver over any adversary. They are to be provided with the requisite Combat Support (CS) and Combat Service Support (CSS) to support and sustain the battle and provide essential elements of such support to joint or coalition forces as may be required of the Army in an Executive or Lead Agent role.

The NMS identifies the foremost responsibility of our military force as being ready to fight and win the Nation's wars should other instruments of national power prove insufficient to secure our national interests. It is the fundamental reason for the existence of the armed forces. The core requirement of the NMS is to provide, project, and sustain a force that is able to fight, and win, two MRCs on a nearly simultaneous basis. Achievement of such a combat force and supporting capability is built on five fundamental foundations as outlined in the NMS. First, it requires the recruitment and retention of quality men and women who are provided realistic and challenging training. Secondly, it necessitates a high state of readiness, to include joint readiness, so that the force is ready to deploy and fight anywhere at any time on short notice. Thirdly, it requires the application of force enhancements that will enable us to better project and control the force, and the battlefield upon which it is employed. Fourthly, it requires the modernization of the force through the application of new technologies that will serve to give it the essential combat edge over its most capable adversaries. Finally, it requires balance of the force through an appropriate mix of active and reserve components, essential warfighting capabilities, and supporting infrastructure that provide for the versatility to respond to a broad range of missions and provide for a hedge against unanticipated threats.

THE ARMY VISION -- FORCE XXI

In light of guidance provided by the NSS, NMS, and NCA the Army has embarked upon a fundamental transformation intended to prepare itself to fight and win on future Third Wave (Information Age) Warfare battlefields. That effort is predicated upon the Army's vision of future military operations ranging from war to Operations Other Than War (OOTW), as expressed in Training and Doctrine Command (TRADOC) Pamphlet 525-5, "Force XXI Operations. A Concept for the Evolution of Full Dimensional Operations for the Strategic Army of the Early Twenty-First Century."

The concept behind Force XXI constitutes a new way of thinking in light of that new wave of warfare to accommodate the broad range of operational and warfighting capabilities required of a smaller, resource constrained, primarily CONUS-based, power projection Army. The strategic goal of Force XXI is to produce a new generation Army that is not just smaller but is substantially different and significantly better -- an Army that has far greater deployability, versatility, lethality, survivability, Operational Tempo (OPTEMPO) capability, sustainability, joint and combined connectivity, and expansibility.

By exploiting Information Age technologies and leveraging the inherent qualities of its Soldiers and leaders, and by redesigning its fighting forces and its sustaining base to better support those forces, the Army expects to achieve a quantum leap-ahead in warfighting capabilities that will enable it to overwhelm any potential adversary and achieve decisive victory as part of a joint force. It expects to do so by its enhanced capability to rapidly project and sustain forces on a global basis; to dominate maneuver across the depth, breadth and height of the battlespace; to conduct precision strikes at longer ranges; to win the information war by providing for a continuous, real-time view of the battlefield and the enemy's disposition; and, by protecting the force so as minimize casualties. These represent the required warfighting capabilities and objectives of a Force XXI Army. They are, in part, to be achieved through the Army's modernization program imperative so as to enable it to fight and win on any battlefield, even when faced by a numerically superior adversary. The Force XXI modernization imperative,

when properly resourced and balanced in conjunction with the Army's five other fundamental imperatives (i.e., effective doctrine, quality people, competent leaders, challenging training, and appropriate force mix), will contribute to bringing the Force XXI vision to fruition.

In summary, the principal characteristics projected for the Force XXI Army are:

- CONUS-based rather than forward deployed
- Capabilities-based design rather than designed for specific threat or systems
- Smaller but more lethal, resilient, and versatile
- Expandable, flexible, modular force design
- Strategically deployable, capable of forced entry and rapid withdrawal
- Seamless, capable of split-based operations
- Organizations that are digitally linked, networked, and organized for a particular situation
- Battle command based on real-time, shared simultaneous situational awareness
- Trained for joint, combined, and coalition operations across the full continuum of conflict - from war to OOTW

It should be noted that the Force XXI concept is neither considered to represent some definitive end state nor lead to a static mix of organizational structures or force components. Rather, it constitutes an holistic and iterative process that continuously seeks to identify changes that are required, proactively pursues those changes that appear to have merit, and effectively implements those that serve to add value. As a philosophical construct, Force XXI is itself based upon four philosophical components. First, it presumes that the Army is genuinely a learning organization, committed to the pursuit of quality and excellence in all that it does, and willing to constructively learn from every experience, be it positive or negative. Force XXI implies a commitment to proactively hypothesize, rigorously experiment, and objectively evaluate the practical application of new ideas or technologies so as to avoid stagnation, preconceptions, and parochialism. Secondly, Force XXI presumes that the Army is not a staid and legacy-bound entity, but is capable of accommodating new technologies over time in a manner that provides for their

compatibility and interoperability with earlier versions of systems still in the inventory. Thirdly, Force XXI presumes the existence of a "rolling baseline," wherein each iterative model of the force as may be derived from successful experimentation becomes the baseline for the next series of experiments to further enhance the force's capabilities. Finally, Force XXI presumes that some final end state is never going to be achieved. The process of change, experimentation, and enhancement will be successive and cumulative in nature, and the Army will forever be in the process of further evolving the force to capitalize on emerging technologies and accommodate new threats and operational requirements as they unfold. That view speaks to the reality that the only constant we can expect in the future is that of change, and that the pace of such change will only accelerate in light of the rapidity at which new technological advances are expected to occur.

The Army has already begun its transformation into a 21st Century force, with the expressed intention of making the requisite fielding and support decisions by Calendar Year (CY) 2000 that will permit implementation of the Force XXI construct as rapidly thereafter as programmed resources will permit. That transformation is, of necessity, going to involve the entire Army, "from the foxhole to the factory" and from "top-to-bottom."

AXES OF ADVANCE IN BUILDING FORCE XXI

The approach being employed in building Force XXI is broadly outlined in the Army's Force XXI Campaign Plan of 9 September 1994, and involves three complementary axes of advance and effort. They will be briefly highlighted at this point with greater discussion being provided on certain aspects thereof in subsequent sections .

Joint Venture (JV) Axis: The JV Axis will serve to redesign the entire operational, or Tables of Organization and Equipment (TOE), force. It will involve a series of linked experiments, demonstrations, and programs that include:

ADVANCED CONCEPT TECHNOLOGY DEMONSTRATION (ACTD)

DESCRIPTION: Mechanism for intense user involvement in technology assessment and insertion into warfighting systems. Performance period may be multi-phased and extend beyond 5 years.

OBJECTIVE: Evaluate military utility; develop corresponding concepts and doctrine; residual operational capability.

EXECUTION:

- OSD responsibility
- Executed by the Services

ADVANCED CONCEPT TECHNOLOGY II PROGRAM (ACT II)

DESCRIPTION: Technology program designed to demonstrate proof of principle, and high-risk/high-return concepts proposed by industry and academia to support Battle Lab experiments and AWEs. Successful technology can transition directly to end items or become part of Army Research and Development programs. Performance period is intended to be 12 months or less.

OBJECTIVE: Encourage application of new technology not currently available in Army programs.

EXECUTION:

- SARDA responsibility
- Proposals solicited by Army Research Office and selected by ACT II Committee
- Executed by RDECs, Army Laboratories, and Battle Labs.

ADVANCED WARFIGHTING EXPERIMENT (AWE)

DESCRIPTION: AWEs are center-of-gravity culminating efforts focused on a major increase to warfighting capability. They cross many or all of the TRADOC domains of Doctrine, Training, Leader, Organizational, Materiel, and Soldier Systems (DTLOMS). Moreover, they have an impact on most, if not all, of the battlefield dynamics and battlefield operating systems. Advanced warfighting experiments are approved and prioritized by the CG, TRADOC. There is extensive involvement by HQDA, FORSCOM, AMC, and OPTEC.

EXECUTION:

- TRADOC responsibility
- Executed by Battle Labs

ADVANCED TECHNOLOGY DEMONSTRATION (ATD)

DESCRIPTION: A Science and Technology funded, risk-reducing, proof of principle demonstration conducted in an operational environment rather than in a laboratory. Technology developers, systems managers, and Army users develop exit criteria that allows successful technology to transition directly into system improvements or become part of Army Research and Development programs. Performance period is intended to be 3 - 5 years.

OBJECTIVE: Evaluate technical performance to meet exit criteria.

EXECUTION:

- SARDA responsibility
- Executed by Research Development and Engineering Centers (RDEC) and Program Executive Offices (PEOs)
- Must support a Battle Lab Experiment or AWE

Collectively, these complementary experiments, demonstrations, and programs are intended to provide the necessary input for the Army's leadership to make informed decisions relative to the incorporation of value-added warfighting capabilities through the leveraging of technology. They are also intended to identify and ensure the integration of accompanying Doctrine, Training, Leader Development, Materiel, and Soldier Systems (DTLOMS) initiatives that require programmatic action. The current objective is to have made those key design decisions about the objective Force XXI division by late CY 1997, to field the first "appliqué" division (i.e., retrofitted with advanced information technologies) by CY 2000, and to field the first "appliqué" corps by CY 2006 (or perhaps sooner, if feasible). That corps will contain the Army's first fully "embedded" division, in which advanced information technologies have been built into all of its equipment and in support of which all related DTLOMS initiatives have been implemented.

Institutional/TDA Axis: This supporting axis will address the redesign of all the Army's Major Commands (MACOMs), Headquarters, Department of the Army (HQDA), and the Field Operating Agencies (FOAs) and Staff Support Agencies (SSAs) of HQDA. It will involve the examination of all Title 10 functions performed by the MACOMs through a three-phased series of Functional Area Analyses (FAAs), with emphasis on the streamlining and consolidation of existing MACOM functions and infrastructure. The objective of the Institutional/TDA Axis effort is to completely redesign and prudently downsize the entire Institutional/TDA Army to eliminate redundancies and achieve economies of scale, while providing for an efficient and effective sustaining base infrastructure that retains sufficient capability to support the Force XXI power projection Army as is evolving under the JV Axis effort. The process is to culminate in the making of all required decisions and the incorporation of related programmatic actions to support the restructuring of the Institutional/TDA Army by CY 2000.

Army Digitization Office (ADO) Axis: This supporting axis is to focus on the identification, development, acquisition, and assimilation of key Information Age technologies that will enable the Army to "win the battlefield information war" by optimizing its warfighting and support capabilities at all echelons "from the foxhole to the factory." The ADO Axis directly supports the other two axes by ensuring that Information Age technologies are acquired and fielded on a timely basis, horizontally across the force in a synchronized manner.

INTEGRATION OF EFFORTS ALONG THE THREE FORCE XXI AXES

The Louisiana Maneuvers Task Force (LAM) process is intended to monitor and coordinate activities along all three axes of Force XXI so as to ensure horizontal integration and synchronization of both organizational redesign and technology acquisition efforts. Its principal purposes have been defined in the 3 December 1995 TAP as being: to serve as a central point for the identification of those critical issues requiring study; to promote the achievement of consensus among the Army's senior leadership; to provide direction for the study of Title 10 and warfighting issues; and, to expedite decision-making at the senior leadership level by accelerating feedback obtained from studies, experiments, and analyses. The LAM process provides the stimulus for the reassessment of Army roles and missions, the coordinated development and exploration of plausible options, and the objective assessment of progress. It serves to compress the decision-making process from years to months by reducing the lead time required to examine, experiment, and provide meaningful information about new ideas that offer value-added benefits to Force XXI as it evolves.

TRADOC Pamphlet 525-5 presumes that all future operations can be expected to be joint in nature and most probably multinational. The lines that traditionally compartmentalized the Services' tactical and support operations have blurred and will continue to do so. This requires that Force XXI have joint, multinational, and interagency connectivity. It requires that planning efforts at all levels -- especially the strategic and operational -- be more closely coordinated and integrated among the Services. The joint nature of future operations is further emphasized in Volume Four (Future Capabilities) of the Joint Chiefs of Staff (JCS) Joint Planning Document (JPD), which identifies the top five warfighting capabilities required by Combatant Commands.

TOP FIVE FUTURE JOINT WARFIGHTING CAPABILITIES

- Near perfect real-time knowledge of enemy - near real-time dissemination
- Promptly engage regional forces in decisive combat on a global basis

- Employ capabilities suitable to actions at the lower end of the spectrum of military operations which allow achievement of military objectives with minimum casualties and collateral damage
- Control the use of space
- Counter weapons of mass destruction and future ballistic and cruise missiles to CONUS and deployed forces

THE ARMY'S BATTLEFIELD LABORATORIES PROGRAM

One of the principal tools that has been employed to date in the building of Force XXI is the Battlefield Laboratories Program which was established in 1992. A TRADOC publication entitled "Battle Labs...Defining the Future," dated May, 1995, provides definitive information regarding the program and the areas of focus for each of the respective Battle Labs. In themselves, the titles of the Battle Labs serve to indicate their foci:

- Battle Command Battle Lab
- Combat Service Support Battle Lab
- Early Entry, Lethality, and Survivability Battle Lab
- Depth and Simultaneous Attack Battle Lab
- Mounted Battle Space Battle Lab
- Dismounted Battle Space Battle Lab

Succinctly put, TRADOC's Battle Labs serve as laboratories for translating new ideas and theories into value-added warfighting capabilities through rigorous experimentation and analysis. They are organized as multidisciplinary task forces and constitute the link between the user and developer communities. They provide for horizontal examination, evaluation, and integration of warfighting requirements and solutions across the spectrum of DTLOMS. Their respective efforts are fully coordinated and integrated on both a horizontal and vertical basis, resulting in an holistic understanding and articulation of warfighting needs and the impacts of proposed solutions relating thereto.

At present, the principal experimentation tools of the Battle Labs are simulators and a variety of early generation simulations -- including constructive, virtual, and live simulations. These will eventually be linked under the Army's Distributive Interactive Simulation (DIS) program into a seamless Synthetic Theater of War (STOW) paradigm that provides for geographical connectivity and interactivity.

The Battlefield Laboratories Program constitutes a new wave business practice and approach to building the Army of the 21st Century with respect to which several critical points warrant emphasis. First, simulations and simulators will increasingly be employed as a means for prospectively assessing the potential value-added impact on warfighting capabilities of new ideas, advanced concepts, and technologies. As the capabilities, fidelity, interconnectivity, and interactivity of those simulations improve, they can be expected to become the principal tools for developing and validating warfighting capability and programmatic requirements. Secondly, the Battlefield Laboratories Program does not constitute a unilateral effort on the part of the Army. It is an integral part of the Reinvention Laboratory aspect under the National Performance Review, a collaborative effort among government organizations seeking very deliberately to improve the ways in which they accomplish their respective missions and eliminate bureaucratic barriers to doing so. Other Services have already participated in Battle Lab experiments with the Army as a means to holistically examine joint and coalition warfighting concepts; interfaces have already been established between the Battlefield Laboratories Program and governmental agencies, allied armies, and civilian industry. Thirdly, the program is invariably going to accelerate the pace at which future change occurs across the DTLOMS spectrum. It will significantly reduce the lag time between conceptualization and fielding by providing the kind of capabilities-driven, objective, and analytical information upon which senior decision-makers can act. In a resource constrained environment, not everything that is demonstrated to add value will necessarily be affordable; accordingly, those Battle Lab experiments that demonstrate the greatest warfighting return on the investment in resources will most probably be the ones selected over the others. Finally, the program harbors significant potential for the evolution of advanced simulators and simulation capabilities that will serve to increase force readiness through more realistic and challenging training of the total force on a virtual basis, at all echelons

from the foxhole to CONUS. Before we even have to deploy and fight in a conflict, we will have already fought it under the STOW paradigm, and determined how we are going to decisively win with a minimum of casualties once actually employed.

No element of the Army community can afford not to become a full and active participant in the Battlefield Laboratories Program, and that is especially true for the AMEDD.

THE ARMY OF 2013 AND BEYOND

At present, there are perhaps more questions than definitive answers regarding exactly what Force XXI will entail in the way of organizational designs, force mixes, etc. . The FAAs, warfighting experiments under the LAM process, and other analyses as are scheduled to occur between now and the end of CY 1998, will serve to provide the requisite answers for the Army's leadership to make many of the key decisions regarding Force XXI by the time of the next biennial POM submission. Those decisions can be expected to result in a reallocation of the Army's constrained resources in the FY 2000-2005 POM to underwrite actions relating to those decisions, with the attendant need to identify programmatic "bill payers." By the time work on the FY 2002-2007 POM begins in late CY 1999, the preponderance of the issues and questions regarding Force XXI will have been resolved, and the hard decisions made relative to the significant reallocation of already constrained POM resources required to underwrite the fielding of Force XXI. That FY 2002-2007 POM will, for all practical purposes, serve to cast the die in determining what the Army is going to look like through at least CY 2007, and probably through CY 2017 or beyond. Subsequent POM submissions, admittedly, will provide opportunities to make programmatic adjustments. Absent the resurgence of a significant threat to the national security, however, the fiscal reality is that such future adjustments will occur only at the margins and at the expense of other important Army programs.

The Army clearly stands at a critical juncture. Its engineering efforts and decisions regarding Force XXI, as will be made over the next 2-3 years, will serve to define and produce an Army with which we may well be obliged to live for perhaps two decades. It is essential, therefore,

that the reengineering of the Army be done well in a studied and prudent manner, based on sound decisions that have been made in light of all available information and a careful analysis of the risks involved.

The AMEDD can neither operate nor exist within a vacuum, since it is an integral part of the larger Army community. As such, it must pay attention to what is happening within that larger community as the Army evolves on a fast track towards Force XXI. This section addresses the major trends and initiatives observed to be occurring within the Army, as identified through review of the strategic plans and references cited at Appendix A. It is intended to provide background in light of which the AMEDD's own strategic vision of the future can be articulated, one that is in consonance with what the rest of the Army is doing.

Information Management

Force XXI will be, first and fundamentally, designed around information, and it is the effective collection, rapid dissemination, and intelligent use of that information that will drive the quantum leap in warfighting effectiveness upon which the Army is counting to offset the impact of downsizing. In "The Army Enterprise Strategy...The Vision," (AES) of 2 July 1993, are provided the overarching framework and guidance for synchronizing Army efforts across the broad area of Command, Control, Communications, Computers, and Intelligence (C4I). That framework and guidelines are in consonance with the Joint Chiefs of Staff concept of C4I for the Warrior, the Defense Information Infrastructure, and sound business practices. Extracted from the AES, the following ten guiding principles are to govern C4I development, acquisition, and fielding decisions within the Army:

- **Focus on the Warfighter:** Provide the Warfighter systems that meet validated needs.
- **Capitalize on Space-Based Assets:** Provide the Warfighter assured access to mission-essential military and commercial space-based systems that support the Force Projection Army across the entire operational continuum.

- **Modernize Power Projection Platforms:** Provide the Warfighter a modern power projection platform to support peacetime operations, training, mobilization, force-projection, split-based operations, and redeployment.
- **Implement Multi-level Security:** Provide the Warfighter the ability to access and exchange information at needed levels of classification using a single C4I system.
- **Acquire Integrated Systems Using Commercial Technology:** Provide the Warfighter synchronized C4I capabilities that leverage commercial technology.
- **Ensure Joint Interoperability:** Provide the Warfighter C4I systems that interoperate in Joint and combined operations.
- **Digitize the Battlefield:** Provide the Warfighter an integrated digital information network that supports warfighting systems and assures C2 decision-cycle superiority.
- **Optimize the Information Technology Environment:** Provide the Warfighter more efficient information support for combat and peacetime operations.
- **Ensure Spectrum Supremacy:** Provide the Warfighter electromagnetic spectrum supremacy in order to maximize the benefits of maneuver and tempo in conjunction with firepower.
- **Exploit Modeling and Simulation:** Provide the Warfighter with cost effective training, testing, and rapid prototyping through state-of-the-art modeling and simulation.

Within this context of the broader C4I vision and guiding principles, the Army Digitization Campaign Plan of 1995 and the Army Digitization Master Plan (ADMP) of 1995 focus on specific actions designed to digitize the battlespace. That digitization effort will involve the application of extant and emerging Information Age technologies in forms that are specifically tailored to meet the needs of each Commander, shooter, and supporter. This is intended to contribute to a clear, accurate, and real-time understanding of the battlespace in which mission planning and execution are to occur. Battlefield digitization further provides for an integrated and seamless digital information network that assures decision-cycle superiority in the area of

command and control (C2) and the provision of essential support to the warfight. The ultimate goal is for everyone to have the requisite and timely information at whatever their battlespace location so as to share a common picture of what is happening with respect to both friendly and enemy forces and the progress of on-going operations. It is the means for achieving interoperability within the Army and among elements of other Services and agencies, which will contribute to increase lethality, survivability, OPTEMPO, synergism, and the application of overwhelming force against the enemy. That force does not have to be quantitatively superior, but it has to be qualitatively superior; continuous access to real-time and meaningful information that can be used to rapidly and decisively act will provide for the qualitative superiority.

There will be a shift from the use of fixed mainframe-based systems to one of a client/server architecture that supports a distributed processing capability within an interconnected, seamless, and open systems environment (OSE). Transition to that OSE will be accomplished by CY 1999 in accordance with the Sustaining Based Information Services (SBIS) program. A multi-media system of systems will be created that supports the transmission of information via voice, video, imagery, and data modes; sufficient, deployable combat camera capability with full electronic imaging will be available for worldwide still and full motion video image transmission.

Operationally, Battlefield Digitization will provide for enhanced situational awareness, improved target acquisition and hand-off, and improved direct and indirect fires, as well as contribute to fratricide avoidance. Technically, Battlefield Digitization will entail the use and integration of modern, high speed transmission "pipelines" that move large quantities and streams of data between and among force elements in a seamless and transparent manner via the application of technologies relating to processing and display of data, position and navigation information, combat identification sensor detection, and distributed database management. Organizationally, Battlefield Digitization will apply within a warfighting platform, among platforms, across an echelon horizontally throughout the force, vertically between echelons within the force, and among joint and coalition forces.

Systems will be designed to be Soldier friendly, capable, reliable, and deployable. To the maximum extent feasible, they will employ approved Common Operating Environment (COE) standards adopted from the civilian sector that serve to link and provide for interoperability among Army, joint, and multinational systems. Commercial Off the Shelf (COTS) and Nondevelopmental Items (NDI), in both the software and hardware arenas, will be employed to the maximum extent possible to build and field modular systems that obviate developmental costs, expedite acquisition, facilitate repair and replacement, and enhance the accommodation of future upgrades. Upgrades and insertion of new technologies into existing systems on an evolutionary basis will be the norm versus new starts or system-wide replacement buys.

The supporting telecommunications infrastructure will employ space-based and terrestrial beyond-the-line-of-sight communications linkages to produce an enduring worldwide communications transmission backbone that provides for vertical connectivity from the foxhole all the way into the CONUS base. Space-based platforms will provide the requisite capability to horizontally link geographically dispersed elements and provide shared, real-time position location, navigational assistance, weather data, terrain imaging, and intelligence. Space-based systems will further serve to reduce the communications-electronics footprint and targetability of units. Whether space or terrestrially-based, what will be critical is "assured communications" (i.e., the certainty that priority electronic transmissions will not be interrupted throughout the tactical, operational and strategic levels of operations).

Organizational Development

Force XXI will be a power projection Army based primarily in CONUS, expected to accommodate an increasingly broad range of missions ranging from MRCs to OOTW. The cultural theme relating to the redesign of the TOE force structure to accommodate Force XXI will be to emphasize modularity so as to facilitate the rapid tailoring of a specific operational force to support a given mission requirement. In response to OOTW missions, the joint task force commander will be able to "mix and match" modular capabilities that contribute to a balanced force with maximum mission capability and minimum force footprint. Similarly, the

redesign is to look to increasing effectiveness and reducing staffing requirements through the consolidation of functions and activities to eliminate redundancies and to focus on developing and using multifunctional organizations wherever feasible to reduce the number and types of units required to deploy.

The current hypothesis is that the corps and divisions will be the central elements of strategic land power, with the division serving as the centerpiece around which to organize modular forces. Experimentation over the next two years will validate that hypothesis, as well as finalize the Force XXI concept regarding how the division will finally look and operate. The trend will, however, undoubtedly be to divest the division of tasks and activities that distract from its core functional competency of battle command and control. Efforts will be exerted to reduce its size and increase its "tooth to tail" ratio.

This is consistent with the philosophical shift from a paradigm of focusing on weapons systems ("feed the guns") to organizing around warfighting capabilities and information. The emphasis will be less on the numerical count of separate killing systems present in a given battlespace than on the ability to integrate and optimize their efforts through maneuver and fires, so as to decisively engage and defeat enemy forces in the shortest time possible with the minimum number of friendly casualties.

The design force principles to be applied in the redesign of the TOE Army, and which will contribute to the building of the Force XXI division are as cited below:

- Organized to optimize information-based operations.
- Capable of dominating the battlespace through the mediums of speed, space, and time.
- Able to control battlefield tempo with overwhelming lethality and superior survivability.
- Able to mount, execute, and recover from operations simultaneously.

- Capable of quick, decisive victory with minimum casualties.
- Rapidly deployable and operationally agile.
- Enhanced tailorability through modularity across the force.
- Capable of diverting tasks which inhibit the division's primary mission: to fight and win battles and engagements.
- Effective in war and military operations other than war as part of a joint and multi-national team in all operational environments.

The institutional/TDA Axis of Force XXI advance will result in a significant reengineering, flattening, and downsizing of the Tables of Distribution and Allowances (TDA), or non-operational forces, part of the Army. The number of MACOMs will be reduced through elimination and consolidation to a base case of only three and an alternative scenario involving the possible addition of up to five more "mini" MACOMs of lesser size and scope. Under the base case, the United States Army Medical Command (MEDCOM) would become a subordinate command of a new Force Sustainment Command MACOM built upon the chassis of the present Army Materiel Command (AMC). Under the alternative scenario, MEDCOM would possibly remain as one of the five "mini" MACOMs. The HQDA staff will become substantially smaller, with the transfer of many of its current functions down to those MACOMs as remain; similarly, the functions performed by the FOAs and SSAs of HQDA will be passed down to the MACOMs. At all echelons, TDA organizations will be forced to justify functional activities in light of their contribution to maintenance of the Army's core competencies. Functions or activities that can not be so justified will be eliminated. Those that are justifiable but are not military-unique will be accomplished through the most resource-efficient approach, to include outsourcing or privatization wherever feasible. Base Realignment and Closure (BRAC) activities will continue as a means to eliminate or consolidate installations and activities to achieve operating economics of scale; the infrastructure and operations of those installations having a major role in the power projection and sustainment of deployed forces will be resourced on a higher priority basis. The efficiency and effectiveness of administrative and support operations at all installation echelons will be enhanced through the leveraging of information technology, improved business practices, and Total Army Quality (TAQ) standards and techniques. The relevancy of existing Army

branches and corps will be reexamined in light of the smaller Officer corps remaining in a downsized Army. What remains of the Institutional/TDA base after reengineering will be more lean, streamlined, efficient and cost-effective, and directly attuned to the support of a power projection Army.

As noted, selected installations will become power projection platforms to support the deployment of forces from the CONUS base to contingency areas of operation. For some of those installations, there will be additional missions relating to the continued sustainment of the forces once deployed, along the lines of a split-based operation as will be addressed later. Broad doctrinal principles relating to the roles and responsibilities of power projection installations will provide them the basis to train, exercise, and test their power projection processes. The Army has indicated its intention to divest itself, through the BRAC process, of those installations - and their related programs, activities, facilities, etc. - that do not contribute to the support of a power projection Army, so that limited resources can be diverted on a priority basis to those that do.

Installations will be required to institutionalize and apply TAQ as an underlying management philosophy, as well as apply the Army Communities of Excellence (ACOE) program standards. Resource constraints relative to staffing, especially uniformed personnel, will require that they investigate alternative means for performing functions; where it is feasible and would make good business sense, they are to consider alternative arrangements that include regionalization, interservice cooperation, centralization, consolidation, and privatization.

Doctrine is the Army's "engine of change," in that it effects how forces are organized, equipped, trained, employed, and sustained. Under the Force XXI construct, there has already been a fundamental shift away from the Cold War paradigm of prescriptive doctrine that focused on echelonment, presentation rates, precise force-on-force ratios, and a deterministic approach that told the commander how to conduct the warfight. In the future, there will be no prescriptive doctrine that mandates how the battlespace is to be managed and the warfight conducted. Doctrine will be revised to become more descriptive in nature, providing for a broader range of fundamental principles to be learned and understood, and then applied as appropriate by

commanders in light of the various situational scenarios as they may actually encounter, from war to OOTW. Commanders will have to determine what principles are germane, tailor them to the circumstances, and apply them through the art of battle command. This empowerment of Commanders to interpret and act in the application of broad doctrinal principles is also seen as requiring a concomitant shift from a hierarchical and fairly centralized command and control structure to one that will incorporate both hierarchical and nonhierarchical processes, as well as cross-boundary interfaces.

Future doctrine will have become more joint in nature, since that will be the primary way in which most operations will be conducted, especially in OOTW. As already noted, the Institutional/TDA base within CONUS will require the development of broad doctrinal principles that similarly guide the conduct of sustainment operations at power projection platform installations that support deploying and deployed forces.

From a force packaging standpoint, the bulk of forces as will be required at the outset of a MRC are seen as being drawn primarily from the AC, with high priority RC units providing only those capabilities not found or adequately resourced in the AC. As operations continued, the RC would become more involved in the provision of support to deploying forces, back fill of active units, reinforcement in the area of operations, and beef up of the Army's mobilization base if needed. Units of the RC, however, will come to play an increasingly active and important role in support of the OOTW, especially the CSS area.

In a related vein, Department of the Army Civilians (DAC), DOD civilians, and non-DOD civilians (e.g., contractors, vendors, Host Nation Support civilians) will assume an increasingly greater role and involvement in operations from war to OOTW, especially in the Combat Service Support (CSS) arena. Such future uses of civilians will require the development of doctrinal principles governing their employment, changes to various federal regulations and possibly laws, and adjustments in command and control structures.

Force Modernization

The smaller the Army, the more modern and technologically superior it must become, capable of rapidly acquiring and fielding cost-effective, leap-ahead technologies to give it a decisive warfighting edge. The ready availability of modern technology on the open market can enable relatively unsophisticated armies to acquire substantial warfighting capabilities in selected areas that could present a serious threat to deployed U.S. forces. The modernization objective as established in the Army Science and Technology Master Plan (ASTMP) calls for expediting the fielding of winning edge technologies before an adversary can develop or buy them. The past paradigm for developing and acquiring weapons systems, however, has proven to be too slow, cumbersome, and expensive to provide for such rapid assimilation of technology. In this regard, the Army and DOD have placed a high priority on reforming the acquisition process so as to have it:

- Focus on core competencies, requirements, and the Army's critical priorities and objectives.
- Eliminate non-essential standards and exploit off-the-shelf commercial systems.
- Shift away from mass production to agile and flexible manufacturing.
- Adopt best business practices, products, processes, and standards..
- Procure on price-based best value vice lowest cost approach.
- Streamline acquisition structure and reduce acquisition cycle time.
- Exploit advanced distributed simulators and embedded training.
- Employ integrated decision trees to better define and meet customer needs in a timely and responsive manner.

The past approach of developing new systems and going into full-scale, high-rate production of these systems over extended periods of time will become the exception. Emphasis has shifted from procurement of systems to the procurement of enhanced capabilities through the application of breakthrough technologies. Future production of new systems as may be fielded will be at much lower rates and in far smaller quantities because of fiscal constraints. The enhanced Force

XXI warfighting capability will come from the insertion of new technologies into existing platforms through validated system upgrades and pre-planned product improvements.

While maintaining a robust science and technology program base to meet military-unique needs, increased emphasis will be placed on cooperative ventures between the Army and elements of academia and private industry. The Federated Laboratory Initiative will serve to increase partnerships with university and industry laboratories that possess world class competencies in technological areas that can not be matched within the government, especially for those technologies that have a broader application for use within both the military and civilian sectors. The Army will seek to promote research that has "dual-use" and "spin-off" applicability as a means to reduce in-house developmental costs, leverage the civilian research community, and capitalize on new commercial developments.

The approach applied to materiel development in the future will be to give industry maximum flexibility in the design and development of products by providing information on what capabilities are required by the Army, rather than stifling specifications on how products are to be made. The Army will more aggressively monitor civilian sector product developments, and will capitalize on them through increased COTS and NDI procurement.

Modernization efforts will increasingly emphasize Horizontal Technology Integration (HTI) of common technology capability across dissimilar warfighting systems, so as to reduce total procurement costs, promote standardization, simplify repair and maintenance, increase component interoperability, and enhance effective use of manpower. Training and maintenance diagnostics will be embedded in equipment as it is procured or receives product improvement upgrades. Increased emphasis will be required in the area of Manpower and Personnel Integration (MANPRINT) so that the necessary balance is achieved between the technology and the Soldier who will be using it; that MANPRINT fit will have to occur earlier in the design phase and, unquestionably, prior to procurement. Greater emphasis and attention will be required regarding the environmental and safety aspects associated with new products, and what can be done to mitigate any undesirable impacts.

Materiel development will focus on improving power projection capability and reducing the strategic lift burden through the acquisition of materiel that has decreased volume and weight. Emphasis will also increase regarding the use of embedded diagnostics, increased reliability, and component swap-out, as means to reduce the need for strategic deployment of a large maintenance and repair infrastructure into an area of operations. Increasingly, system-specific technical and logistical support for complex or unique systems will be provided by "full-service" manufacturers and vendors who are prepared to deploy in support of contingency operations.

Logistics and Sustainment

The DOD Strategic Logistics Plan outlines a comprehensive and ambitious agenda for significantly reengineering and improving logistical support across the spectrum of operations -- strategic, operational, and tactical. The two principal goals driving that effort relate to achievement of a better, faster, more reliable, and highly mobile logistics response capability; and, a leaner logistics infrastructure that effectively balances defense and private sector capabilities. The principal goals and objectives of the DOD plan, which are intended to shape the plans and efforts of the Services' logistical communities, are:

GOAL 1 Reduce Logistics Response Time

- (1) Implement total asset visibility
- (2) Measure responsiveness at customer level
- (3) Improve mobility to support the NMS

GOAL 2 Develop Seamless Logistics System

- (1) Field modernized business systems
- (2) Establish comprehensive benchmarking system
- (3) Improve communications of logistics information

GOAL 3 Streamline Logistics Infrastructure

- (1) Implement most successful business practices

- (2) Outsource non-core logistics functions
- (3) Reduce weapons systems logistics support and sustainment requirements

The Army Strategic Logistics Plan (ASLP) constitutes the Logistics Campaign Plan for Force XXI and outlines a comprehensive approach for implementing the logistical vision of "a seamless logistics system capable of providing world-class logistics support for America's Army in any scenario." That vision has resulted in a paradigm shift from emphasizing echelon support from successively larger logistical support complexes to an emphasis on projecting and sustaining force capability through "just-in-time" deliveries on an anticipatory rather than a reactive basis.

Under Force XXI, most logistical support units that were previously organic to combat maneuver units at the division level and below will be removed and relocated farther to the rear under corps-level ownership. Tactical logistical support will be provided from the rear forward to specific rendezvous points in the battle command area, via tailored logistical support packages (LOGPACs). Such will minimize CSS presence in the battle command area, negate the need for large convoys, maximize dispersion of CSS units, and reduce the targetability of CSS.

The Logistics community will implement a Total Distribution Program (TDP) in support of Force XXI that will serve to display the logistical requirements and status at all echelons - strategic, operational, and tactical. The TDP will specifically provide for Total Asset Visibility (TAV) and In-transit Visibility (ITV) of supplies and materiel on a global basis. The TDP will further provide for the capability to monitor and manage materials distribution from factory to foxhole. To support the TDP, the Standardized Army Management Information System (STAMIS) will be modernized, to include the incorporation of business management tools for use in both the garrison and field environments. This is consistent with the Information Management Area strategy that calls for the fielding of compatible systems that can be employed in support of both peacetime and wartime operations and provide for a seamless and interconnected electronic network from the tactical through the operational to the strategic level.

The logistical force required to be present in the contingency area of operations as part of Force XXI will be substantially reduced through the application of the split-based concept of logistical operations. Under that construct, the force will deploy only with those functional logistical capabilities as are minimally required, with a substantial portion of the logistical sustainment force remaining in CONUS. The deployed logistical component of the deployed force will be linked electronically directly to the CONUS base on a continuous, real-time basis. Within the CONUS base, one or more installations will provide the power projection platform from which supplies and materiel will be dispatched to the deployed force. The split-based concept frees up both strategic and tactical transportation, eliminates the stockage of excessive supplies in the area of operations, significantly reduces the size of the deployed CSS force, and permits a greater "tooth to tail" ratio in the deployed force.

The Army has been assigned over 40 Executive Agent responsibilities regarding support rendered to one or more of the other Services or multinational forces. That role will expand, especially in the areas of OOTW and humanitarian operations.

The Logistics community's concept of the National Provider warrants special note, as it represents a revolutionary proposal. The National Provider is envisioned to be a joint command with the following core responsibilities:

- Plan and execute all DOD-defined logistics functions above (but integrated with) tactical level.
- Develop with CINCs and Services Operational Measures and Standards of Performance (MSOCs).
- Maintain real-time logistics situational awareness.
- Satisfy prioritized requirements to specified standards.
- Support warfighting CINCs through Joint Theater Support Commands (SUPCOMs)
- Own and operate the National database, which captures and reacts to real-time changes in command priorities.

- Acquire and maintain sufficient materiel, infrastructure, support forces, and lift to support the NMS.

The National Provider would provide national-level capability to resource, procure, manage, and control the critical logistical functions as they relate to acquisition, distribution, deployment, materials management, and maintenance. It would perform these functions on a global basis, in support of all operations involving U.S. forces. The National Provider concept, presuming concurrence among the Services and DOD, is to be implemented in an evolutionary manner on a phased basis, to be fully operational by CY 2020. While not so stipulated, it can be presumed that the National Provider concept will eventually evolve to the point that its proponents propose the inclusion of medical services support as a component thereof.

The reliance on civilians to assist in the provision of logistical services in direct support of contingency operations will increase, especially in OOTW. The Logistical Support Element (LSE) is a construct that has already been demonstrated in practice. A composite organization consisting of both AC and RC elements, DAC and DOD civilians, and private sector contractors, it provides for a tailorable and flexible type of organization to support selected theater level sustainment activities. The Logistics Civil Augmentation Capability (LOGCAP) is a similar construct that will employ civilian contractor support to provide for initial and continuing base operations (BASOPS) support to a deployed force. The logistics community has also proposed the establishment of a "bank" of functional area experts (e.g., morticians, crane operators, telecommunications specialists, etc.). The Army would identify, recruit, certify, and register such personnel in the "bank" from which they could be individually activated for use in a crisis.

Training and Leader Development

The challenges posed by rising costs, declining resources, force downsizing, and increasingly complex operational requirements have necessitated a comprehensive reevaluation of the way in which the Army has traditionally conducted and managed training in the past. The U.S. Army Training and Doctrine Command (TRADOC), as the principal proponent for Army training, has

formulated a comprehensive strategy and broad agenda for dealing with those challenges. It focuses on the three pillars of Army training -- unit, institutional, and self-development -- and it envisions the leveraging of Information Age technologies to provide the means for increasing the accessibility, effectiveness, efficiency, affordability, and impact of training.

The overarching strategy for Army training in the 21st Century is embodied in TRADOC's Army Training (AT) XXI, which is supported by three complementary plans and their associated program initiatives: WARFIGHTER XXI, which focuses on the unit component of training and constitutes the main effort of AT XXI; WARRIOR XXI, which focuses on the institutional and self-development components of training and provides for a training strategy and system that support individual through Joint Task Force (JTF) levels of training; and WARNET XXI, which focuses on the linkage of training technology acquisition, new equipment training, and systems training support products. Collectively, they will provide the ways and means for revolutionizing the conduct, management, and support of training within the Army of the 21st Century.

The FY 2010 end state envisioned by TRADOC for AT XXI calls for an electronically based and networked system that supports both unit and individual training in all components, though the maximum leveraging of Information Age technologies that provide for distributive training, distributed interactive simulations (DIS), the digitization of training support programs and products, and the total automation of training development, delivery, and management.

Under the Total Army Schools System (TASS) concept, RC schools and academies will be restructured and linked to the TRADOC school system, ensuring the provision of standardized instruction and materials to both RC and AC Soldiers and units. The CONUS base would be subdivided into seven geographical regions, within each of which there would be six brigades, respectively responsible for oversight of training efforts in the areas of Leadership, Officer Education, Health Services, Combat Arms, Combat Support, and Combat Service Support. In turn, each brigade would have battalions aligned with the various TRADOC proponents for specific career management fields, such as Fort Benning for Infantry. Those battalions would

direct the activities of instructor groups, each of which would have multiple sites at which instruction or training support were actually provided in support of the RC. While differing training modalities and methodologies might be employed at those various sites to meet the unique needs and circumstances of the RC, both the RC and AC will be required to adhere to and meet the same training standards.

Under the TASS, TRADOC's infrastructure will be reconfigured through the collocation of AC branch schools at fewer installations, and the establishment of Centers and Satellites. Satellites will primarily offer branch-specific technical and tactical training, through the maximum employment of distributive learning technologies and techniques. Centers will be the focal points for joint and combined training and synchronization and will provide the preponderance of training related to Officer, Warrant Officer, and Non-commissioned Officer Education Systems (OES, WOES, NCOES) development. The majority of civilian professional development and Staff and Faculty (S&F) training will emanate from the Centers. Under the broad guidelines of TRADOC's Combined Arms Training Strategy (CATS), Centers will be the foci for promulgation of system-wide training policy, planning and management relating to their respective career field spheres, and the coordination and provision of training delivery, management, and support to the seven TASS regions and their subordinate elements. The number of AC training institutions will decrease through consolidation or collocation of AC branch schools, the increased use of joint training for common specialties, the employment of contractor or civilian training for selected job skills that are not military unique, the consolidation of enlisted and officer career fields, and the full integration of RC and AC training activities.

All elements of the TASS will be electronically linked to provide for worldwide access to and dissemination of training programs and products, through the application of such technology as video-teleconferencing (VTT), teletraining networks (TNET), satellite education networks (SEN), and DIS. When fully implemented, TRADOC's "Classroom XXI" (or "wall-less classroom"), "distant learning" (DL), and Army Training Digital Library (ATDL) concepts will provide the basis for supporting the delivery of training in non-resident modes directly to Soldiers and units on a world-wide basis, whenever and wherever needed.

The approach to training development will be to emphasize the preparation and archiving of training programs and products that are prescriptive from the standpoint of standards but are descriptive regarding the approach. Based on the projected availability of more effective automated assessment and diagnostic tools, Commanders will be able to identify specific training shortfalls, and determine exactly what training is and is not needed by their Soldiers and units. Doctrinal training support packages (TSP) will be developed and archived in the ATDL, providing for a wide "menu" of relevant materials from which Commanders can select in preparing their units to progressively learn to "crawl, walk, run." These programs and products will be readily and rapidly retrievable on a "dial-up" basis and will lend themselves to being easily customized to meet specific individual or collective training needs at unit level. The time required under the Systems Approach to Training (SAT) process to develop and make such training products available to the field will decrease, with greater participation by field units in the conduct of SAT-related task analyses and evaluations. Subject Matter Expert (SME) resources will no longer be restricted to training institutions but will increasingly be drawn from other organizations and field units. The privatization of selected training development functions and the delivery of contract instruction will become more prevalent, releasing assigned staff from institutions for the accomplishment of higher priority missions. Under AT XXI, the roles and responsibilities of individuals will greatly increase relative to providing for their own development through enrollment in distributive training programs that serve to maintain functional task proficiency, enhance skills, and provide for the acquiring of new skills. Self-development will increasingly become a phased component of resident programs of instruction (POI) in both the AC and the RC, and will thereby contribute to a shortening of resident programs or, in some cases, to their being made fully distributive with no resident phases.

The demand for and use of DIS will substantially increase, and the improved fidelity and realism of distributed simulations will eventually be expanded to include participation all the way down to the level of an individual Soldier on a fighting system platform. The Combat Training Center (CTC) program will remain the centerpiece of the Army's collective training program for battalion-level combined arms teams under realistic and challenging warfighting scenarios. The

primary vehicle employed for training brigade through Echelons Above Corps (EAC) level units will be simulations. The DIS concept will serve to eventually link the respective CTCs and all other types of simulation activities into a seamless and integrated network of virtual, live and constructive simulations that are unconstrained by geography. Embedded training in systems will become more prevalent, obviating the need for resident training in support of force modernization efforts. The Regional Training Site (RTS) programs -- maintenance, medical, intelligence, and probably others -- will be expanded to provide for increased capabilities in support of RC training, to include the conduct of selected Military Occupational Specialty (MOS) training, Additional Skill Identifier (ASI) training, portions of NCOES, external evaluations (EXTEV) to Mission Training Plan (MTP) standards, simulation training, etc.

Force XXI will require a new generation of "improvisational" leaders who are extremely information management literate and possess additional "soft" skills regarding foreign languages, cultural sensitivity, foreign area orientations, etc. They will have to be provided with a high level of training that emphasizes the development of special cognitive abilities so as to prepare them to be more adept at effectively orchestrating complex systems of systems that transcend their own specific branch orientations. Such training will have to instill a greater degree of analytical ability, creativity, common sense, and judgment of the part of leaders. Their introduction to joint and coalition operations -- from the tactical, operational, and strategic level standpoints -- will have to occur at earlier points in their careers given the demands that will be placed upon them under OOTW scenarios.

All of these initiatives are interrelated and mutually supportive. In the aggregate, they will contribute to a significant shift in the Army's traditional training paradigm. Service schools will orient less on the actual conduct of resident training than on the development, packaging, archiving, and dissemination of information that can then be used to effectively support training at other locations via other modalities and methodologies, wherever and whenever needed, and to the same standards for all components. Resident instruction will increasingly be confined to that which requires a high degree of personal interaction, group dynamism, or the employment of unique equipment or facilities that can not be as effectively made available through other means.

A DARK SIDE SCENARIO

The ultimate goal of the Force XXI effort is to provide for an Army that, as part of a viable joint force, is capable of fighting and winning the Nation's wars -- anywhere and anytime. With respect to that central goal, several points warrant note.

The Army may not have experienced the end regarding downsizing. Given the altered threat situation and the perceived absence of any truly significant adversary in the foreseeable future, there are those who would propose the building of a military force designed to deal with but one MRC rather than two. There exists, therefore, the prospect that the Army's AC end strength could be further reduced below the 495K level currently contained in FY 1998-2003 programming guidance.

Any reduction in the AC's end strength to substantially below the 495K mark would have a significant impact on the Army's ability to build and field a balanced force with the requisite warfighting capabilities. Given existing "tooth to tail" conventions, the "tooth" requirements for fielding even an eight division AC force under, for instance, a 450K end strength figure would leave too few Soldiers to accommodate all the essential "tail" functions. Such a dark side scenario would require a major reassessment and realignment of the Army's resources, one that could only be accommodated at the expense of important CS and CSS operations and the Institutional/TDA base within CONUS.

At the 495K figure, the army is already at the margin. The application of Information Age technologies can only be expected to do so much, and might not prove sufficient to offset further downsizing. Any shift to a single MRC scenario and the accompanying reduction in the Army's end strength associated with that shift would harbor potentially significant risks to the Nation's security. Hopefully, reasoned judgment and the still ambiguous international landscape will serve to preclude such a dark side scenario. It is, however, incumbent upon the various MACOMs to at least consider such an untoward development and investigate alternative

approaches within their respective spheres for strategically dealing with the significant challenges as would be posed by it.

THE MILITARY HEALTH SERVICES SYSTEM

Not only is the AMEDD part of the larger Army community, it is also an integral part of the larger joint medical community that comprises the Military Health Services System (MHSS). This requires that attention be given by the AMEDD to those strategic plans emanating from the ASD(HA) and the respective Medical Departments of the United States Air Force (USAF) and the United States Navy (USN).

Synopses relating to the most current (1995) strategic visions and plans of the USAF and USN Medical Departments are as respectively contained at Appendices B and C. They should be reviewed at this point in the narrative to obtain a feel as to the directions and areas of emphasis within those other Services' Medical Departments.

The MHSS strategic plan of 1995 is a joint document to which the ASD(HA) and the Surgeons General of the Services' Medical Departments are contributors and signatory parties. The collective vision of that group relative to the MHSS vision, and goals and objectives relating thereto, are as provided in the synopsis at Appendix D. In formulation of that MHSS strategic plan, a number of key strategic assumptions were made, the key ones of which have been noted at Appendix E.

The Medical Readiness Strategic Plan 1995 - 2001 (MRSP 2001) of 20 March 1995, constitutes the ASD(HA) strategy and road map for achieving and maintaining a high state of medical readiness, defined as encompassing "...the ability to mobilize, deploy, and sustain field medical services and support of any operations requiring military [medical] services; to maintain and project the continuum of healthcare resources required to provide for the health of the force; and to operate in conjunction with beneficiary healthcare." It addresses a broad range of actions intended to enhance readiness in nine major functional areas as are outlined at Appendix F, along

with the specific supporting objectives as related to each of those functional areas. Appendix A to the MRSP contains specific action plans relating to each functional area objective which serve to highlight the objectives to be achieved, the tasks to be accomplished, and the specific activities having responsibility for those actions as relate to achievement of the objective. The MRSP constitutes the DOD "...guide book by which we [DOD] will achieve a fully capable military health care system ready to support the continuum of military operations...the compass for articulating requirements and resources, and for developing policies and procedures."

An ASD(HA) Memorandum, SUBJECT: "Medical Program Guidance, FY 1998-2003," dated 14 February 1996, provides supplemental guidance that directly impacts on development of the respective Services' POMs and governs submission by the Services' Medical Departments of input relating to the separate development of the Defense Health Program (DHP) POM. The guidance contained therein addresses the broad principles under which the form and structure of the DOD health care mission are to be shaped for the 21st Century. Of all the MHSS-related planning references heretofore cited in this section, the ASD(HA) programming guidance memorandum provides the clearest and most explicit programmatic direction relative to initiatives that are of strategic import over the long term, most of which harbor substantial resource ramifications.

A TALE OF TWO POMs

The AMEDD is concurrently involved in the preparation and submission of input relating to the biennial development of two separate POM documents -- the Army POM and the DHP POM. These inputs should be fully crosswalked and synchronized in light of POM programming guidance as respectively promulgated by HQDA and ASD(HA). Review of AMEDD input for the FY 1998-2003 POM, however, indicates that this has not fully occurred in a number of cases.

A specific case in point relates to the modernization of the AMEDD's aeromedical evacuation fleet, which constitutes one of its highest priorities. Programming guidance from ASD(HA) in its memorandum of 16 February 1996, indicated that "The Army shall initiate procurement of the

approved capability requirement to modernize its aeromedical evacuation assets." In that sentence, the operative word is "shall," for it conveys a programming mandate. The required modernization capability as has been identified to meet that mandate is to convert the current UH-1 fleet not only to UH-60's but to the advanced UH-60Q model. The Management Decision Package (MDEP) associated with providing for that capability involves a total of \$188.9M in Other Procurement, Army (OPA) funds over the POM period, all of which currently remains in the Unfinanced Requirement (UFR) category following the prioritization of all its MDEPs by the Aviation Program Evaluation Group (PEG). While the UH-60Q upgrade is the AMEDD's #1 modernization priority and its top UFR going into the current POM build, it ranks as but #13 on the total UFR listing as prioritized by the Aviation PEG. In light of its relative position within that listing, the probability is that the UH-60Q MDEP will remain well below the final funding cut line, no matter how important it may be to the future of the AMEDD and the MHSS. Since UH-60Q type classification is to be completed by FY 1998, it can be expected that the AMEDD's UH-60Q modernization initiative will die due to lack of funding. Accordingly, the Army's Basis of Issue Plan (BOIP) for such aircraft will include none for the AMEDD throughout the POM period.

The preceding example is but one of several in which the programmatic guidance of ASD(HA) and the outcome of the Army's POM process are not in synch. The time to synchronize programming guidance of ASD(HA) and that of the Army begins far in advance of the start of the POM build process and the convening of the applicable PEGs. It is imperative that the next POM build be so synchronized, or other critical AMEDD programs can be expected to similarly die due to lack of programmed resources. For development of the Army's next biennial POM submission, there will be far more demands for Force XXI programs and initiatives than there will be funds to underwrite them. The link between strategic planning and programming has to be forged early-on, and TAP is the document in which that linkage has to appear.

CLOSING COMMENTS

During the remainder of this decade, such profound and far-reaching changes will occur throughout the Army that the changes that have taken place over the past few years will seem pale in comparison.

The Joint Venture Axis effort will result in a redesigned operating (TOE) force that is smaller but has been provided with significantly greater warfighting capabilities through the leveraging of Information Age technologies. Those greater capabilities will change the way in which the force operates within the battlespace and conducts the warfight -- in a revolutionary way. This will have a major impact on how the warfight is to be sustained, and will continue to challenge the support community to identify better solutions and approaches than have yet been fully developed. The Institutional/TDA Axis effort will result in a reengineered TDA infrastructure that has been pared down to an absolute minimum -- through divestiture, consolidation, sharing, privatization, and contracting. Not only will the remaining TDA force of DAC and uniformed personnel be smaller in the aggregate, the uniformed component will have been significantly reduced as a percentage of the total. The TDA organizations and installations that remain will be challenged to become far more efficient, effective, and productive at doing more with less through the application of Information Age technologies and the employment of better business practices. Pending improvements in the acquisition process will serve to expedite the continued modernization of the force, but this does not necessarily mean that it will be easier to acquire new materiel or technologies. Modernization initiatives as proposed will be more critically scrutinized and challenged in light of fiscal constraints; those who do the scrutinizing will expect evidence of the substantial value-added benefits to be derived, as can be demonstrated through rigorous experimentation and validation. The shift in focus from an institutionally-based training paradigm to a new paradigm of unit-based training, one that is distributive in nature and available on-demand, poses significant challenges beyond the changing of traditionalist mind-sets. An enormous effort will be required to produce the requisite quantities of training programs and materials, or effect the redesign and repackaging of extant ones, to fully support such a

distributed training strategy. It will require a significant investment in both technologies and training developer resources, an investment that will be needed on a fairly immediate basis.

For several years, the AMEDD has been in the vanguard of change anticipating and wrestling with such challenges. In doing so, we have been guided by a clear vision of where we thought we needed to be going in light of the emerging Force XXI construct, and we have been working to bring that vision to fruition.

Having briefly examined what is transpiring within the rest of the Army and key external agencies, we are in a better position to reassess our own vision and undertakings, and make the fine tune adjustments as may be necessary to take into account that which is transpiring within the larger communities with which we are obliged to interact.

Hence, to Volume III.

APPENDIX A

Key Planning References

A National Security Strategy of Engagement and Enlargement, February 1995

Air Force Medical Service Strategic Plan, Roadmap to the Year 2000, 1995

Army C4I Technical Architecture, Version 3.1, 31 March 1995

Army Digitization Campaign Plan, 31 January 1995

Army Digitization Master Plan, 30 January 1995

Army Digitization Master Plan (Coordinating Draft), November 1995

Army Distance Learning Plan, Volume I, 31 January 1996

Army Enterprise Implementation Plan, 8 August 1994

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Army Leader Campaign Plan, 25 January 1996

Army Modernization Plan, 1995

Army Science and Technology Master Plan, Volume I, December 1994

Army Strategic Logistics Plan, Version I, 28 February 1995

Army Strategic Mobility Management Plan, 11 September 1995

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Battle Labs, Force XXI, Defining the Future, May 1995

CSA Message, 081145Z, Subject: Building the Force for the 21st Century -- Force XXI

DA Pamphlet 100-XX, Force XXI Institutional Army Redesign (Final Draft), 12 April 1996

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FM 100-1, Force Integration, January 1995

FM 100-5, Operations, 14 June 1993

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Institutional Army Re-engineering and Redesign Campaign Plan, 21 March 1995

Joint Venture Campaign Plan, Updated version of 18 June 1995

Medical Department of the United States Navy Strategic Plan, Journey to Excellence: Meeting the Challenges of the Future, 29 August 1995

Medical Readiness Strategic Plan 1995-2001, March 1995

Military Health Service System Strategic Plan, May 1995

National Military Strategy of the United States of America: A Strategy of Flexible and Selective Engagement, February 1995

The Army Plan, FY 1998-2013, 3 December 1995

TRADOC Pamphlet 11-9, Blueprint of the Battlefield, 10 May 1991

TRADOC Pamphlet 525-5, Force XXI Operations: A Concept for the Evolution of Full-Dimensional Operations for the Strategic Army of the Early Twenty-First Century, 1 August 1994

TRADOC Pamphlet 525-200-6, Combat Service Support Battle Dynamic Concept, 1 August 1994

TRADOC Strategic Plan, 1995

WARFIGHTER XXI Campaign Plan, Version 2, Undated

WARRIOR XXI Campaign Plan (Draft - Version 2), 27 November 1995

APPENDIX B

Synopsis of Air Force Medical Service Strategic Plan "Roadmap to the Year 2000," 1995

The mission of the Air Force Medical Service is to:

Expand, mobilize and deploy medical support for contingency operations worldwide; develop and operate a comprehensive and cost-effective community-based health care system.

- Promote health, safety, and morale of Air Force people.
- Provide or arrange timely, high-quality health care.

The basic principles upon which the Air Force Medical Service focuses are:

- Empowerment at the Point of Contact
- Decentralized Organization
- Respect for the Individual
- Leadership Involvement
- Dedication to Mission
- Management by Fact
- Commitment to Professional Excellence
- Build on Aeromedical Heritage
- Promote Autonomy
- Ethical Behavior
- "Do No Harm"

The plan focuses on the realization of the following goals and supporting objectives:

Goal 1: Provide support to employed forces and returning casualties while minimizing impact on the medical benefit.

- Meet medical requirements of the theater commanders.
- Sustain world leadership in aerospace medical research and practice.

- Provide clinically appropriate patient regulating and airlift.
- Maintain CONUS-based medical capability.
- Champion technology development to enhance survivability and system performance.
- Train the total force as we plan to operate.

Goal 2: Build a managed care system that integrates quality, cost and access.

- Meet or exceed national standards.
- Maintain a reputation for clinical excellence.
- Provide the highest quality outcome at the lowest unit cost.
- Provide incentives for sound business decisions.
- Maximize access to care.

Goal 3: Be the leader of comprehensive and integrated programs of disease prevention, health promotion, and fitness.

- Educate Air Force people.
- Systematically evaluate leading edge technology and practices; implement and manage proven programs.

Goal 4: Promote a safe and healthful environment.

- Be a key partner on the environmental team.
- Monitor and evaluate compliance with standards.
- Enhance community awareness of environmental issues.
- Be the DOD leader in environmental education.

Goal 5: Provide a responsive and sensitive health care atmosphere.

- Communicate.
- Design, construct, and maintain facilities that support the delivery of health care and the special requirements of the populations served.

- Maximize the identification and acquisition of state-of-the-art equipment and information systems to support delivery of health care.
- Apply state-of-the-art technology to improve our business practice.
- Lead organizations where people value quality service and are empowered to provide that service.

Goal 6: Capitalize on the opportunity to improve processes at all levels.

- Lead the cultural change to Quality Air Force.
- Support training infrastructure.
- Eliminate counter-productive policy.
- Vitalize policy development.
- Use an automated decision support system.
- Exploit telecommunication technology.

APPENDIX C

Synopsis of Medical Department of the United States Navy Strategic Plan "Journey to Excellence: Meeting the Challenges of the Future," 29 August 1995

The vision as outlined in the plan is:

We are committed to providing an environment of health care excellence in which:

- All entrusted to our care proudly view Navy Medicine as their preferred source of health care.
- Health care professionals view Navy Medicine as a superior arena for realizing their professional growth and satisfaction.
- Health care organizations view the Navy Medical Department as a paradigm of excellence.
- Fleet and field commanders view Navy Medicine as fully capable of providing optimal, timely, and comprehensive health care to their Sailors and Marines worldwide in peace and war.
- Our people view themselves as empowered members of the world's finest health care team.

The vision is built on the following Guiding Principles:

- Support the combat readiness of the Navy and Marine Corps.
- Ensure the best physical and mental health of the men and women of the United States Navy and Marine Corps.
 - Care for all persons as unique human beings worthy of our courtesy, compassion and respect.
 - Earn the trust and confidence of our patients by enthusiastically providing prompt access to quality health care.
 - Attend to the medical needs of the families of our active duty members, our retirees, and their families, for just as the family supports the force, so must we support the family.

- Teach, for it is through education that we build the foundation of our future.
- Continuously improve in all aspects of our enterprise.

The vision focuses on the realization of the following goals and supporting objectives (coined "strategies" in the plan):

Goal 1 - Readiness The Navy Medical Department will maintain and improve its capability to respond to ever-changing wartime, peacetime, and contingency operational requirements.

- Advocate health promotion and physical fitness as a readiness issue.
- Provide the educational and health care resources necessary to support all members of the Navy and Marine Corps family in achieving and maintaining healthy and fit lifestyles.
- Encourage and support individual responsibility and partnership between operational and health services systems in preventing, or failing prevention, managing illness and injury.
- Organize, equip, and train for the full spectrum of contingency operations, developing and maintaining training programs to support all naval and joint operational readiness requirements.
- Maintain and improve research, development, and technology integration programs to support the full spectrum of operational requirements.
- Take a leading role in the evolution of expeditionary logistics, leveraging technology to enhance capabilities while reducing lift requirements and footprint ashore.

Goal 2 - People: The Navy Medical Department will recruit a high quality, seamless Active and Reserve force, configured for the year 2000 and beyond, train them for excellence, and create an environment that retains the best of its personnel to ensure mission accomplishment.

- Recruit sufficient numbers of Active and Reserve personnel with appropriate skills to meet mission requirements.

- Stimulate and enable every member of the Medical Department to reach his or her full potential by providing the very best opportunities for professional and personal growth consistent with our mission.
- Ensure that all its personnel with Medical Augmentation Program assignments complete initial platform specific training and undergo periodic refresher training.
- Proactively enhance the quality of life of its members.
- Accomplish its mission through teamwork.

Goal 3- Technology: The Navy Medical Department will be a leader in technology integration.

- Pursue development of digital management information systems.
- Ensure that Navy Medical communication systems are integrated to store and transfer medical information throughout the Department of Defense.
- Encourage the use of appropriate technologies to enhance and measure quality of care, readiness, patient satisfaction, resource utilization, and efficiency.
- Obtain and distribute current hardware and software and train Medical Department personnel for collection of accurate and timely information.

Goal 4 - Stewardship: The Navy Medical Department will empower all its members and shepherd higher headquarters toward optimal resource stewardship.

- Forecast resource requirements based on provision of those health services shown to be the most effective and efficient for health maintenance and restoration.
- Develop and implement more innovative and efficient acquisition strategies.
- Commit to the philosophy of multi-year funding for operation and maintenance of its facilities.
- Encourage commands to use their facilities and resources in accordance with their updated master plans, focusing on quality management.
- Proactively evaluate and size facilities, equipment, and requirements across the organization, adjusting infrastructure to provide optimal cost effectiveness.

Goal 5 - Health Benefit: The Navy Medical Department will assure that all eligible beneficiaries have access to their entitled health benefit in an integrated system.

- Promote wellness and personal responsibility for health.
- Offer timely, user-friendly access to educational, preventive, diagnostic, and therapeutic health services.
- Utilize its assets (personnel, materiel, and facilities) to maximum potential.
- Integrate seamlessly with other Federal health agencies as well as civilian managed care organizations.
- Serve within the overall national health care system as a benchmark for providing quality service in a cost-effective manner.
- Pursue an aggressive marketing agenda detailing the benefits of the Military Health Services System program to all eligible beneficiaries.

APPENDIX D

Synopsis of Military Health Services System Strategic Plan, 1995

The vision of the Military Health Services System (MHSS) is:

As the world's pre-eminent military health services system, we are accountable to the American people for support of national security and the health of military personnel, retirees, and their families. Together, we are committed to:

- Readiness for joint operations in a dynamic global environment.
- Provision of top quality cost-effective health benefits.
- Development of military and civilian leaders who excel in a changing world.
- Innovation and the application of new technology.

The plan focuses on the realization of the following goals and supporting objectives (coined "strategies" in the plan):

Goal 1 - Joint Medical Readiness: We will ensure that our joint medical readiness capabilities prepare us to respond successfully to a rapidly changing continuum of military operations.

- Provide our operational forces a continually ready, well-trained, and well-equipped medical force.
- Ensure a doctrinally sound, operationally integrated, joint medical force capable of successfully meeting health service demands throughout the continuum of military operations.
- Align our resources to support the prioritized requirements of our operational forces.

Goal 2 - Strategic Leadership of MHSS: We will take an aggressive approach to leading and managing the MHSS in a rapidly changing environment.

- Work collaboratively at all levels to aggressively pursue our shared mission and vision for the future of the MHSS and the people it serves.

- Use a strategic, systematic approach to overall management of the MHSS.
- Develop a regional approach using lead agents and the joint resources of the military services, and empower local commanders to optimize health care delivery.
- Achieve program efficiencies through appropriate make/buy decisions and resource sharing.

Goal 3 - Leader Development: We will develop leaders in management, clinical, and technical positions who excel in a joint environment and a changing world.

- Enhance and sustain an integrated system of quality education, training, and professional development to procure and retain skilled and dynamic leaders.
- Enhance and sustain a culture which encourages participation at all levels, fosters pride, and attracts and retains world class personnel.

Goal 4 - Benchmark Health System: We will be the benchmark health delivery system, responsive to customer needs, where quality, access, and cost effectiveness make us the first choice.

- Implement a world class health delivery system which is:
 - Capable of meeting the readiness demands of DOD.
 - Health and fitness focused.
 - Primary care based.
 - Integrated by the precepts of managed care.
- Clearly communicate the elements and scope of the health entitlement/benefit associated with military service so that our customers will be educated consumers.
- Work aggressively to ensure appropriate resources are available to deliver the military health entitlement/benefit.

Goal 5 - Technology Integration: We will integrate technologies to enable the best possible and most cost beneficial clinical management outcomes.

- Define the full range of technologies needed to satisfy all MHSS missions.
- Plan for, procure, install, and maintain technologies to provide cost beneficial solutions to meet approved MHSS requirements.

APPENDIX E

Department of Defense Strategic Thinking Assumptions Health Affairs and the MHSS in 1998, 21 September 1996

- Proactive health care will be provided through the TRICARE program.
- Medical readiness and health outcomes for troops in a deployment will be better than in previous deployments.
- The MHSS will have quantifiable goals, objectives, and performance metrics in support of the strategic plan.
- Customer, especially beneficiary, needs will be the driving force for policy decisions.
- Medical Treatment Facility (MTF) infrastructure will be rightsized to fewer than 100 hospitals and medical centers by 1998.
- Services' active military, reserve, and civilian end strengths will continue to shrink.
- The Office of the ASD(HA) will shrink to fewer than 90 positions by 1998.
- The Defense Health Program (DHP) will grow at less than one half the national rate.
- Regional and MTF resource allocating will be based on a refined, capitated user/enrolee population methodology.
- Medicare reimbursement for those Medicare-eligible beneficiaries who enroll in TRICARE Prime will be attained.
- Military medical personnel will continue to deploy for contingency operations and OOTW, requiring back fill from RC and/or contract personnel.
- There will be medically-led, medically-specific OOTW operations requiring medical leaders to integrate non-medical support operations.
- Economic and logistical analyses will be used as input for the making of decisions regarding the employment of scarce resources.
- Lead agents will enjoy a significantly increased ability to hire and contract for medical and support personnel and services.
- Mutually beneficial joint efforts will increase among DOD and other key agencies, including the VA and Health and Human Services (HHS).
- Tools will be available to assess population risk for disease.

- Graduate Medical Education (GME) programs and medical training will be Tri-Service integrated, consolidated, and reduced.
- Enhanced readiness training programs will continue, requiring the availability of the peacetime health care system.
- New technologies will be integrated into the MHSS in order to support readiness requirements and provide high-quality, cost-beneficial health services.
- A longitudinal, electronic, computer-based patient record will form the basis for health care recording.

APPENDIX F

Synopsis of Medical Readiness Strategic Plan 1995-2001, Dated 20 March 1995

Functional Area: Planning

- Ensure true joint planning is the norm and is driven by integrated, forward-thinking doctrine.
- Provide medical planners with the tools they need to develop effective, executable plans.
- Ensure an inventory of qualified, interchangeable medical planners.

Functional Area: Requirements, Capabilities, and Assessment

- Establish planning factors for 2nd through 5th echelon medical facilities based on the Time, Task, Treater clinical database. Validate all MEPES planning factors annually.
- Develop a mechanism to assess requirements and capabilities for combatant commanders, Services, and the Joint Staff.
- Develop a methodology appropriate for each Service to ensure a match of casualty rate development and application across the full range of operational situations.
- Include medical requirements in all wargaming activities and develop interfaces between wargaming tools and existing and future medical models.
- Develop a plan for linking real-world patient load data with modern Patient Condition codes enabling planners to forecast medical workload and resource requirements.
- Re-engineer the POM development process to allow time for appropriate CINC input and time to calculate and validate medical requirements in support of the Illustrative Planning Scenarios.

Functional Area: Command, Control, Communications, Computers, and Information Management (C4I)

- Ensure the medical structure has a robust, seamless, and assured communications capability within the global communications architecture.

- In accordance with the C4I for the Warrior concept, consolidate medical command and control requirements into a single interoperable capability to be part of the Global Command and Control System (GCCS).
- Satisfy the validated requirement for an updatable, individually carried data storage device with read/write capability.
- Satisfy the validated requirement for a seamless medical information system serving contingency support and beneficiary care across all echelons.

Functional Area: Logistics

- Develop and update acquisition and support plans that support the full spectrum of military operations.
- Ensure that DEPMEDS, other medical assemblages, medical sets, kits and outfits, and non-medical materiel are maintained, refurbished, and modernized in a timely manner to provide quality medical care and capability to support operational requirements.
- Provide medical logistics information management systems and communications systems which allow the transmission and exchange of logistics data within a theater of operations and with the supporting base.
- Develop common baselines for computing medical materiel sustainment requirements and reporting unit or platform medical materiel readiness. Integrate this information into joint medical planning processes.

Functional Area: Medical Evacuation

- Ensure timely availability of required personnel or units to accomplish the medical evacuation mission.
- Define patient evacuation requirements and develop enhanced medical evacuation capability that accommodates shorter theater evacuation policies by all Services.
- Develop CONUS casualty reception and distribution plans as well as intra-regional execution methodologies.

- Develop joint doctrine for the joint use of evacuation assets to include dedicated air ambulance support to Marine Corps contingency operations and establishment of a Theater Patient Movement Requirements Center.
- Develop joint doctrine for the entire medical evacuation system to ensure all levels of evacuation are interoperable and integrated into a seamless system, and provide in-transit visibility of patients.
- Develop and execute a program to procure and/or modernize evacuation platforms.
- Ensure Patient Movement Items (PMI) are standard and interoperable among the Services and are operable aboard evacuation aircraft by developing a system to certify, track, maintain, and recover PMI.
- Identify integrated patient transportation command and control systems to ensure seamless patient transfer and maintain visibility throughout patient movement.

Functional Area: Manpower and Personnel

- Recruit and retain qualified Active and Reserve medical personnel to meet military medical requirements by specialty and grade.
- Ensure a contingent set of medical deployability criteria is used by all Services.
- Develop a program to ensure that all newly accessed Active and Reserve medical personnel attend required entry level military training within twelve months of accession.
- Optimize Service Graduate Medical Education (GME) programs, ensuring they satisfy physician requirements by specialties and numbers.
- Validate requirements and establish early authority to mobilize Reserve component medical forces to integrate with active duty immediate deployment forces.

Functional Area: Training

- Establish a DOD system to provide and monitor medical readiness training.
- Develop a mechanism to ensure DOD-wide minimum competency levels for unique specialty areas.
- Maximize DOD-wide utilization of field medical training sites to enhance interoperability and shared training.

- Increase opportunities for Active and Reserve medical interface in Service-specific and Joint/Combined exercises.

Functional Area: Blood

- Maintain an Armed Services Blood Program which provides quality blood products and services to meet all DOD requirements.
- Develop joint blood doctrine to meet combatant command requirements.
- Complete the worldwide fielding of frozen blood to designated Unified Commands and develop improvements in frozen blood technology.
- Develop and maintain peacetime blood operations which support the continuum of military operations.
- Comprehensively update wartime blood requirements and develop programs, doctrine, policies, and procedures to ensure implementation.
- Monitor and assist blood and blood substitute research and development; incorporate new technologies as they become available.

Functional Area: Readiness Oversight and Evaluation

- Establish DOD process to monitor medical readiness.

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FOREWORD

This is the third, and final of three volumes constituting a White Paper that articulates "The Future Vision of the Army Medical Department (AMEDD)." The principal thrust of each of the respective volumes is as follows:

- VOLUME I AMEDD OF THE PAST AND PRESENT (FY 96 AND BEFORE)**
Provides an historical overview of the events and influences that have compelled the AMEDD to begin a fundamental transformation in order to strategically align itself for the future in light of its future vision.
- VOLUME II THE AMEDD OF THE NEAR TERM (FY 2003)**
Analyzes the future visions and associated strategic planning references, studies, and guidance of the Army and other key external agencies to identify trends and factors impacting on the AMEDD's future vision.
- VOLUME III THE AMEDD OF THE FUTURE (FY 2010 AND BEYOND)**
Creates a blueprint for bringing the AMEDD's future vision to fruition, consistent with what the Army and other key external agencies are proposing to do within their respective spheres.

To some, strategic planning is but another distraction, consuming valuable time that could be more effectively applied to dealing with the multitude of day-to-day operational challenges and problems that invariably have to be faced. What they fail to appreciate is the fact that such challenges and problems are often the result of not having better prepared to deal with the present at some point in the past, when the present was still the future. The strategic planning effort constitutes an investment in an organization's future, and it is a wise one if it contributes to the organization's future vitality, growth and competitiveness.

In itself, having a hard-copy strategic planning document is not essential. What is essential is having a viable process for looking into the future to prospectively identify what the organization should be doing to prepare for it. What is essential is identifying how to resource the doing of what needs to be done. What is essential is ensuring that the organization stays on track in actually doing what needs to be done.

BACKGROUND

Volume I provides a detailed discussion regarding the shift from the Eurocentric paradigm of the Cold War to one that focuses on dealing with regional contingencies, given the demise of the Soviet Union and the emergence of a substantially altered threat situation. Beyond that discussion, some additional comments are warranted.

The world within which we coexist has changed and will continue to change. The only constant to which we can look forward with any degree of confidence is that the pace of such change will continue on an even more accelerated basis. Advances in technology will serve to beget even further advances in technology, exponentially effecting all areas of human endeavor, in ways in which we can perhaps only dream at present. While we may supposedly be confronted with "no significant hostile alliances," as was the case with the Soviet Union, we will face a far more complex array of concerns that harbor substantial threats to our own national interests and world stability. Nationalism, transnationalism, domestic and international terrorism, renegade states and a host of other factors will serve to make the world an unsettled and hazardous place for some years to come. Given the financial wherewithall, virtually any despot or fanatic can clandestinely procure the kinds of advanced technologies and warfighting capabilities as would pose a threat to our national interests and a direct threat to our forces as might be deployed into an area of operations. Such is especially the case with respect to weapons of mass destruction (WMD), and the chemical and biological components thereof.

While the economies of developed nations are becoming more interrelated and interdependent, those nations will become increasingly competitive with respect to penetrating and securing the same world markets. Such will invariably serve to strain relationships among nations, to include traditional allies and trading partners. On the domestic front, significant demographic and cultural changes will occur, resulting in a proportionately older and more infirm population, a greater degree of ethnic diversity, shifting population patterns, increasing economic disparity, and a host of other socio-economic challenges of national proportions. The potential impacts of such demographic changes have already begun to be recognized, as illustrated by the national debates over the future financial stability of the Medicare and Social Security programs, and the appropriate role of welfare-related programs in our society. Additionally, much of our Nation's infrastructure (roads, bridges, waste and water treatment plants, etc.) is aging, and will require a substantial investment in resources to effect the necessary refurbishment or replacement necessary to maintain infrastructure viability and support future economic and population growth. Given a finite level of resources and an almost infinite demand for those resources from multiple claimants, we will see even more national debates relating to how available resources should be allocated and reallocated.

Fiscal constraints will continue to be imposed on federal agencies, such as the Department of Defense (DOD), as a means of freeing resources with which to accommodate other competing domestic priorities.

Within the civilian health care sector, a major shift to a managed care delivery system has already begun, clearly in response to an effort to contain the spiraling costs of health care. Anticipated breakthroughs in science and technology (e.g., genetic engineering, laser technology, micro-miniaturization, artificial intelligence, etc.) harbor the potential for advancing, and altering, both

clinical practices and the ways in which health care services will be organized and delivered. By the early 21st Century, we may well be able to "cure," or at least substantially ameliorate, such scourges as cancer, HIV, schizophrenia, genetically-related syndromes, etc. At the same time, however, the future bodes new medical challenges and threats, such as the appearance of entirely new diseases, antibiotic resistant strains, and environmentally-related hazards. Given the mobility of people on a global scale, major pandemics could occur that resulted in significant loss of life before we were able to medically "put the lid on the box." Given the despot who had the resources to develop or buy the capability, and the willingness to employ that capability, we could encounter some genetically engineered disease against which we were defenseless for months, if not years. Within the medical industry at large, complex professional and ethical questions are surfacing to be faced regarding if and when "to pull the plug," maintenance of patient confidentiality, determining how and in support of whom limited services are to be prioritized, etc.

These few points serve to demonstrate the fact that the demise of the Soviet Union has, by no means, ushered in an era of total peace, prosperity and well-being. If anything, we have perhaps entered a period of even greater ambiguity and instability, and danger, during which we will have to deal with a broader variety of issues and challenges than we ever anticipated -- on both the domestic and international fronts, in both the Army and the Army Medical Department (AMEDD), and within the health care industry in general. What we can anticipate is that the issues and challenges will come, and we must be ready and able to effectively deal with them.

Volume II provides a review of both the National Security Strategy (NSS) and the National Military Strategy (NMS), and the guidance contained therein that serves to frame how the Nation's

military forces are to be employed in light of the altered threat and geo-political situations. From those reviews, the following points warrant reiteration.

Absent the resurgence of a significant hostile alliance, the NSS for the foreseeable future will continue to be "based on enlarging the community of free market democracies while deterring and containing a range of threats to our national interests." In addition to its component objectives of promoting prosperity at home and democracy abroad, it will continue to embrace its third objective of enhancing the Nation's security through the maintenance of military forces that are appropriately sized and postured to perform a broad variety of missions. Being derived from the NSS, the NMS will continue to focus on promoting long-term international stability and thwarting aggression (the "ends"), through the complementary strategic concepts of overseas presence and power projection (the "ways"). The "means" whereby military forces will be expected to execute the NMS involve the components of peacetime engagement, deterrence and conflict prevention, and fighting and winning the Nation's wars. In concert with the other Services, and most probably as part of a coalition effort, the Army must be prepared to decisively win the Nation's wars with a minimum number of casualties. This will continue to constitute the Army's foremost responsibility and remain the principal consideration governing all its activities. At the same time, however, the Army will be expected to effectively accomplish a range of peacetime engagement and deterrence missions relating to such diverse activities as military-to-military contacts, security assistance, humanitarian operations, counterterrorism, counterdrug activities, peacekeeping operations, and disaster relief. It will have to be ready to help shape the post-Cold War world, deter potential aggressors, support civil authorities, and compel any adversary to capitulate through the application of decisive force. In short, the Army will have to be organized, trained and ready to effectively

respond to a broad range of both threats and mission requirements, across an operational continuum that ranges from war to operations other than war (OOTW). Such divergent roles and missions will require a shift from maintaining a threat-based Army to providing for a capabilities-based Army that is versatile and adaptable. As a much smaller and primarily CONUS-based force, the Army must be prepared and able to rapidly project a capable force that has been tailored to deal with any specific threat or contingency requirement as may arise.

FORCE XXI OVERVIEW

The Army's vision of the capabilities-based force of the future is embodied in the concept of Force XXI, which envisions the leveraging and application of advanced technologies to provide for a smaller Army that still possesses the qualitative edge to decisively win against a numerically superior force on tomorrow's Third Wave (Information Age) Warfare battlefields. As Volume II provides a detailed discussion regarding the Force XXI concept, its characteristics and objectives, and how the force is to be built, subsequent discussion will focus on points warranting special emphasis or elaboration in light of their potential impact on AMEDD operations.

There has been a profound shift in how the Army views the development and application of its warfighting doctrine. The current premise is that there can be no single, prescriptive, and authoritative doctrine to deterministically govern the conduct of operations, given the range of missions which the Army must be prepared to accomplish. Accordingly, the Army has adopted a doctrinal construct of Full Dimensional Operations. That construct envisions the development of broad doctrinal principles that will have to be learned and understood by leaders, and then

prudently applied via the art of Battle Command on a situationally-dependent basis in light of the specific requirements faced under any given scenario as may be encountered. Force XXI and Full Dimensional Operations presume that the Army will invariably fight as part of a joint force, and most probably as part of a larger coalition of forces from two or more nations. Such will require that the Army's broad doctrinal principles provide for interoperability and interconnectivity. It will also require Commanders who understand how to effectively and fully integrate their operations with those of multi-service, multinational and interagency partners.

The application of advanced weapons, communications and information management technologies will contribute to the evolutionary transformation of the traditional "battlefield" into an extended "battlespace." That battlespace will be less defined by traditional map boundaries, and will involve an increased depth, breadth, and height. Forces as are displayed within it will be more dispersed to effectively preclude enemy targeting with WMD, and will seek to avoid linear formations, sustained force-on-force engagements, stable fronts, and extended operational pauses. The electronic internetting of units through assured communications linkages will permit the real-time availability and dissemination of intelligence, targeting and other relevant command decision cycle data. Such will lead to an unprecedented, shared situational awareness among all units at all echelons as to what is taking place throughout the battlespace.

The battle command challenge will relate to being able to continuously see, control, dominate, and win at every point throughout the battlespace, while denying the enemy force any advantage in these regards. In a nutshell, the Force XXI warfighter's approach to seizing and retaining the initiative can be sequentially described as being: to know the location and status of friendly forces

at all times; to maintain continuous battlespace surveillance so as to find and fix the enemy force; to strike and attrit that force through the application of lethal, long-range fires and air interdiction; to thoroughly stun and demoralize the enemy by virtue of such strikes and attrition; to rapidly mass and maneuver a tailored force with the requisite combat capability to overwhelm the demoralized enemy force at an advantageous point in time and space; to engage and destroy what is left of the attritted enemy force in a decisive engagement of extremely short duration; to incur a minimum of casualties and materiel losses in the course of that engagement; and, to rapidly recover and refit for follow-on operations against another stunned and attritted enemy force somewhere else within the battlespace. Commanders will possess the capability to concurrently orchestrate the activities of multiple, geographically-dispersed units over extended distances, with different units being simultaneously involved in the various activities as outlined. Such will permit the virtually sustained conduct of combat operations within the battlespace, day and night, contributing to a high level of operational tempo (OPTEMPO) that can not be matched by the enemy and resulting in an early termination of conflict.

The final design of Force XXI is not yet finalized, and perhaps will never be fully finalized in the sense of some definitive end state structure. Such relates to the Army's determination to be a Learning Organization, committed to the achievement of excellence in all that it does and constantly alert to new ideas and capabilities that will serve to further enhance its warfighting edge. Learning organizations are constantly examining the ways in which they do things, challenging the status quo, acting on what is learned from experience and experimentation, and changing to accommodate new circumstances and better ways of doing business. What the organization looks

like is of less importance than what it is capable of doing, how it goes about doing it, and the outcomes it achieves.

From previous volumes and the key planning references cited in Volume II, the following list has been compiled to provide a number of insights relative to the evolution of Force XXI. That listing is neither exhaustive nor definitive. It constitutes but a departure point for thinking in terms of the kinds of capabilities as would be associated with the insights as noted, and the ramifications inherent with each.

FORCE XXI INSIGHTS

- * First and foremost, an information based force
- * Focused on core warfighting competencies
- * Force design validated via experimentation
- * Rolling baseline, rather than definitive end state
- * Capabilities-based design versus systems-based
- * Smaller, but more lethal, resilient and versatile
- * Divested of non-core tasks not supportive of warfight
- * Greater combined arms and multifunctional focus
- * Based on descriptive versus prescriptive doctrine
- * Adept at joint/multinational/interagency operations
- * Expandible, flexible, modular force design
- * Tailorable to meet various scenario requirements
- * Ready to operate across the continuum of operations
- * Primarily CONUS-based, versus forward deployed
- * Initial deployment forces primarily from AC
- * Seamless, capable of split-based operations
- * Smaller logistical footprint in support of force
- * Increased use of civilians in OCONUS operations
- * Lighter, more strategically deployable by air/sea
- * Capable of rapid power projection from CONUS base
- * Supported by power projection platforms in CONUS
- * Prospective warfight experience via simulations
- * Forced entry and rapid withdrawal capable
- * Minimum force footprint in area of operations
- * Continuous, real-time view of the battlespace
- * Near-perfect, real-time knowledge of enemy
- * Simultaneous, shared situational awareness
- * Deny enemy capability to "see" the battlespace
- * Seamless, assured communications, foxhole to CONUS
- * Digitally linked and electronically internettted
- * Less hierarchical command and control infrastructure

- * Widely dispersed to reduce targetability by enemy
- * Premium on maintaining unit cohesion, force coherence
- * Friend/foe recognition to preclude fratricide
- * Operationally agile, adaptable, able to mass quickly
- * Rapid movement across broad expanses of terrain
- * Control and dominate the extended battlespace
- * Able to orchestrate multiple, simultaneous attacks
- * Rapidly mount, conduct, and recover from operations
- * Capable of sustained, high OPTEMPO operations
- * Decisively win, with a minimum of casualties
- * Continuous, intense media scrutiny on global scale
- * Competent, intuitive, improvisational leaders
- * Expansible to meet resurgent threat if it occurs
- * Learning organization, committed to excellence
- * Force XXI -- a journey, not a destination

The individual who can review the above listing and comfortably speak to each of the insights in general terms has a fairly sound grasp of Force XXI. Any individual for whom the listing is but a compilation of phrases that have little meaning or relevance needs to go to the reference list in Volume II and begin some serious self-study, beginning with TRADOC Pamphlet 525-5.

In building Force XXI, the Army has embarked on a new approach to anticipating and defining doctrine, training, leader development, organization, materiel and soldier systems (DTLOMS) requirements as relate to the introduction of new warfighting concepts. That approach is based on a forward-looking assessment of desired Army/Joint warfighting capabilities, versus the building of systems and the reactive correction of shortfalls. Those desired capabilities are to be based on and driven by holistic warfighting concepts that focus on the future, have been validated through rigorous analysis, and serve to produce demonstrable, value-added benefits for the warfighter. Collectively, those concepts constitute a "blueprint" upon which to base specific DTLOMS solutions as are required to implement the concepts. It is established Army policy that any concepts

or DTLOMS requirements that can not be demonstrated to be supportive of the blueprint will not be resourced.

Insights regarding both new Force XXI concepts and DTLOMS requirements relating thereto are to be discerned and validated via experiments that are "progressive and iterative mixes of constructive, virtual and live simulations that involve soldiers and units in relevant tactically competitive scenarios." Experimentation constitutes the "heart of the Army's warfighting requirements determination process," and involves two main categories -- concept experiments, and advanced warfighting experiments (AWE). The preponderance of experiments fall into the former category, relate to functionally-oriented operations or branches, and are resourced in-house by the concept proponent or under TRADOC's Concept Experimentation Program (CEP). The AWE category involves experiments that focus on providing for a significant increase in warfighting capability across multiple branches; AWEs are recommended by a concept proponent, are supported by TRADOC, and are approved and resourced by the Chief of Staff, Army (CSA).

While there exists a wide variety of experiment types, all begin with the postulation of a formal hypothesis based on a concept, operational lessons learned, or scientific research. The hypothesis is rigorously examined through experimentation to ascertain its validity and impact. Such experimentation supports the collection of empirical data upon which the concept proponent can more objectively decide to discard the concept as it stands, modify it and conduct further analyses and experimentation, or proceed with formally documenting it as a valid warfighting requirement that provides for a substantive value-added benefit. School commandants (as at the AMEDD Center and School) are ultimately responsible for defining, documenting and defending new

concepts and related DTLOMS requirements, and experiments provide the requisite information upon which to objectively and cogently do so.

The Battle Laboratories program's experimental methodology involves the employment of Integrated Concept Teams (ICT) that support the multi-disciplinary analysis of proposed warfighting concepts and AWEs from multiple perspectives. Beyond involving the concept proponent and supporting Battle Lab(s) staffs, an ICT is to also include representatives as may be appropriate from other MACOMs, DOD elements, academia, industry, federal agencies, etc. The ICT, while unconstrained by cost considerations during its concept exploration and experimentation efforts, nevertheless contributes to the collection and stratification of potential cost data across the DTLOMS domains that will be supportive of further analyses and decision-making at subsequent points in the requirements determination process. Insights concerning DTLOMS inputs and requirements as are derived from the ICT's efforts -- to include analysis of scientific research, experimentation, operational lessons learned, etc. -- enable the concept proponent to better formulate and compare alternative solutions for achieving the desired warfighting capability. The goal of that analysis is to identify the "most effective, timely and least costly means to achieve the future operational [warfighting] capability." In consonance with that goal, the established priority order in which insight solutions are to be pursued are: doctrine; training; leader development; organizational; and, lastly, materiel. From among the alternative mixes of integrated DTLOMS solutions that would provide for the desired warfighting capability, the least costly and most rapidly implementable solution mix is to receive priority consideration, given cost as an independent variable.

Anticipated, and achievable, advances in simulation technologies and interconnectivity will lead to the eventual creation of a Synthetic Theater of War (STOW) modeling capability by the beginning of the next decade. That STOW capability will support even more rapid modeling, experimentation, multi-disciplinary evaluation, validation, and decision-making relative to the application of new concepts and related DTLOMS solutions. Such will greatly expedite the Army's requirements determination process, and significantly reduce the lag time between conceptualization and fielding of enhanced warfighting capabilities.

Per guidance from the CSA, the TRADOC Commander has been delegated the responsibility and authority to review and approve all routine requirements relating to the enhancement of current warfighting capabilities or the application of new concepts and DTLOMS solutions as will contribute to the realization of future warfighting capabilities -- prior to their submission to Headquarters, Department of the Army (HQDA). Clearly, TRADOC is the Army's gatekeeper, without whose approval and support any proposals having substantial resource ramifications will neither be considered nor underwritten by HQDA. Within the TRADOC Commander's staff, the following key elements are involved with the review and assessment of proposals as may be promulgated by the respective branch proponents, to include the AMEDD:

THE TRADOC

DCSDOC
DCST
DCST
DCSD
DCSD

**REVIEWS, INTEGRATES AND
PRIORITIZES**

Doctrine Requirements
TADSS Requirements **
Leader Development Requirements
Organizational Requirements
Materiel Requirements

**** Training Aids, Devices, Simulators and Simulations (TADSS)**

To some, Force XXI is but an attempt to offset the impacts of downsizing. It is far more. Over the near term, there is no single nation or hostile alliance that presents a clear and present danger to the security and strategic interests of the United States. That situation, however, could well change at some point during the next twenty years, with the emergence of a formidable, information-age capable adversary. The Army can not wait for that to happen and then attempt to respond, as we have been down that road before and paid a high price for not being ready. Notwithstanding the ambiguousness and instability of the times, the risk of having to face a peer adversary in a major confrontation is much lower than was the case during the Cold War. Such provides for a window of opportunity for the Army to undertake the sweeping changes as are required to bring it fully into the Information Age and enable it to remain a viable instrument of national power well into the 21st Century. The Force XXI effort is intended to prepare the Army, in conjunction with the other Services, to win in any confrontation with some peer adversary as may emerge in the future. Failing to do so constitutes the greatest risk of all.

KEY PLANNING CONSIDERATIONS

The AMEDD's future vision should serve to cover the period of the current POM and its associated Extended Planning Period (EPP), which would place our current planning horizon out to the year 2013. While it is difficult to predict with certainty all that could transpire between now and 2013, it

is important for us to think in such terms. If we are not proactively and aggressively involved in shaping our own destiny, there will be others who will do it for us. We simply can not afford to think and act in terms of two or three years out. We have to think and act in light of a longer-range vision if we are going to be prepared for the future and what it portends.

With respect to our vision and strategic planning effort, two points are worthy of note. First, as with the Army and Force XXI, our effort relates more to the journey than to the destination. We may not know exactly what the AMEDD of the future will look like, but we have enough insights into Force XXI to identify the core capabilities we need to have to be able to support that force. Secondly, like the Army and Force XXI, our planning approach is dynamic rather than static. We will employ a rolling baseline, and we will adjust to accommodate what we learn. In preparation for each biennial POM submission, we will review our vision, key strategies, and related implementation plans to ensure that we are on the right track, making such adjustments as are required to keep ourselves on the track and maintain our momentum.

The AMEDD is but one participant in the joint Military Health Services System (MHSS), along with the medical departments of the United States Air Force (USAF) and the United States Navy (USN). Augmenting that system, under auspices of the Assistant Secretary of Defense, Health Affairs (ASD(HA)), is the TRICARE program which supports those eligible beneficiaries not enrolled in the Medical Treatment Facilities (MTFs) of the MHSS. Also supporting the MHSS are the Department of Veterans Affairs (DVA) and various civilian hospitals in the National Defense Medical System (NDMS) network, with which agreements have been negotiated that provide for an increased mobilization bed expansion capacity beyond that which can be achieved through MTFs

of the MHSS. We have established additional collaborative relationships and arrangements regarding the provision of other categories of health services support to eligible beneficiaries, as well as the sharing of services, delivery of common training, and a number of other cooperative endeavors. We have also been involved in the development of formal standardization agreements with the military medical systems of a number of allies. For some time, therefore, the AMEDD has been involved in joint, interagency, civilian health care sector, and multinational medical support operations.

There is, admittedly, a great deal of commonality among all of these elements with respect to the kinds of services provided patients, especially among the Services in their CONUS-based MTFs. An Oncologist is an Oncologist and a surgical nurse is a surgical nurse, whatever the Service affiliation. From the standpoint of effectiveness, the health care services as are provided in the Services' respective MTFs vary very little, if at all, since we subscribe under the MHSS vision to the same high standards of practice, patient access, quality, and cost-effectiveness. Because of the commonalities and congruences, there has been a continuing debate for many years that there should perhaps be a total merger of all Service MTFs under a single system. A more recent corollary to the debate is that some or all of the services provided by MTFs could perhaps be contracted out, or selected MTFs completely closed and their beneficiary populations shifted into the private sector. There are valid and cogent counter-arguments to such proposals, which will not be herein addressed. The important point to note is that a far greater potential exists between now and 2013 that some form of realignment will be mandated regarding the MHSS and how it is organized to provide health care services to eligible beneficiaries in CONUS. Depending on the

specifics of any such realignment, there could be substantial impacts on the AMEDD and the medical departments of the other Services.

Of the number of alternative and plausible futures that could be posited for the Services' medical departments and the MHSS, there are four of which we should remain especially cognizant. They are briefly outlined in very skeletal form at Appendix B, and broadly relate to the establishment of: a Defense Health Agency (DHA) structure; a Joint Medical Command (JMEDCOM) structure; a Federal Health Services (FHS) structure; or, a National Federal Health System (NFHS) structure. The national debate over health care is by no means over, and can be expected to be rekindled in the near term because of the fiscal situation facing the Medicare program. We can not afford to not be attentive to that debate, because it is going to invariably impact upon the AMEDD and the other Services' medical departments, one way or another. That debate will be driven primarily by fiscal considerations.

Each of the four alternative futures as noted constitutes a profound to radical shift from the traditional structures under which the Services' medical departments and the MHSS have operated. When fully developed and analyzed, each structural construct can be expected to convey a distinct set of advantages and disadvantages, risks and benefits, and positive and negative impacts on wartime medical readiness.

Within the AMEDD, we are neither proposing nor advocating any one of the alternative futures -- from a purely structural standpoint. What we propose and advocate is an AMEDD, of whatever size it may be, that possesses the requisite core capabilities to fully support the Army as it evolves

into Force XXI and beyond, across the continuum of operations from OOTW to war. Such is especially the case in light of the Army's expressed concerns regarding the probable emergence of a peer adversary at some point in the early 21st Century. As with the Army, the AMEDD has a window of opportunity during which to effect the sweeping changes that are required to prepare for the future and dealing with any such peer adversary. We must ensure that the opportunity is not squandered.

For planning purposes, our base case scenario will be predicated on the assumption that none of the four alternative futures outlined at Appendix B will come to fruition before the end of the POM period (up to 2003). Further, we will assume that the MEDCOM will remain as a separate Army MACOM under the Force XXI axis effort relating to the reengineering of the Institutional/TDA base in CONUS. Those assumptions, however, are not givens. We must thoroughly develop and cogently present our base case if they are going to remain valid assumptions.

The philosophical underpinning for the AMEDD as an institution is the concept of service -- to the Nation, the Army, Soldiers, their families, and all other eligible beneficiaries. For each of us in the AMEDD, that should mean that what we do involves far more than a job, or even a profession -- it is a "calling," and it truly requires "caring beyond the call of duty." We are a huge consumer of resources and, accordingly, we need to be very good at how we employ those resources from a business perspective. We can do that by further improving our business practices, applying advanced information management technology, and becoming even better managers. We are already providing access to and a level of quality care that can be empirically demonstrated to be substantially more cost-effective than is the case in the civilian health care sector. We can't

quantitatively demonstrate, however, what is in our hearts on a ledger sheet or through some review and analysis metric. Neither will rhetoric serve to convey our convictions. We have to do that through our every action, every day, with every patient and recipient of our services. They will intuitively know that we care -- if our focus remains fixed on service and those whom we serve.

The AMEDD subscribes to the same set of enduring institutional values as does the Army. They are what have made us so effective and successful in the past, under the most demanding of times and operating circumstances. They are key to our continued success in the future. We need to continuously emphasize the fact that those are the values for which we stand, and to which we expect all AMEDD personnel in all components at all echelons to subscribe. We need to demonstrate those values in what we say and what we do, so as to actually "walk the talk." The six Fundamental Imperatives upon which the Army focuses are the AMEDD's as well. Those imperatives are all interrelated, and they need to be adequately resourced and balanced as we go about building the AMEDD of the future.

**THE ARMY'S AND THE AMEDD'S
ENDURING VALUES**

COURAGE	CANDOR
INTEGRITY	COMPETENCE
LOYALTY	COMMITMENT
FAIR TREATMENT	
PERSONAL RESPONSIBILITY	
SELFLESS SERVICE	

**THE ARMY'S AND THE AMEDD'S
SIX FUNDAMENTAL IMPERATIVES**

QUALITY PEOPLE
COMPETENT LEADERS
CHALLENGING TRAINING
MODERN EQUIPMENT
VIABLE FORCE MIX
EFFECTIVE DOCTRINE

These enduring values and these fundamental imperatives -- coupled with our unwavering commitment to the philosophy of service -- will enable the AMEDD to deal with the challenges and

changes as are yet to come. They will enable us to serve our ultimate customer -- the American Soldier.

We must never forget that the American Soldier is the fundamental reason for our existence as the AMEDD. How well we take care of Soldiers at the ultimate and most demanding points of service -- within the battlespace -- is the principal criterion by which our success as the AMEDD will be measured and our value-added benefit to the Army and the warfight will be judged. If we fail in that regard, we don't deserve to remain in business.

THE ARMY'S MOST PRECIOUS COMMODITY -- THE SOLDIER

The Soldier is the Army's most precious commodity and ultimate weapon, and it is truly amazing what motivated Soldiers can and will accomplish when they are properly equipped, trained, and led. They enthusiastically and boldly go into harm's way whenever called upon to do so, typically oblivious to the very real occupational hazards associated with the warfighting profession. In part, such is perhaps due to youthful enthusiasm, and the perception that nothing untoward will happen to them. In part, it is perhaps due to a high level of confidence in their leaders, and the belief that they will not unnecessarily or inadvertently place Soldiers in harm's way. In part, we know that it is due to their expectation that everything possible will be done for them should they ever become ill, or be seriously injured or wounded. They expect that someone will be there to take care of them when they need the care. The Army and the AMEDD have to live up to that expectation.

Discussions relating to combat intensities, casualty rates, forces at risk or any of the other considerations of operational planners are of little relevance to the Soldier who has been seriously injured or wounded. For that Soldier, the situation automatically falls into the high intensity category, be it related to war, OOTW, disaster relief, or training. To the Soldier who is the casualty, all other rate factors are immaterial. Across the operational continuum, we have to be prepared to effectively and responsively deal with each Soldier's illnesses, injuries and wounds whenever and wherever they occur, and that does not happen only in force-on-force engagements. In fact, operations on the lower end of the conflict scale, such as peacekeeping, may pose a greater challenge from the medical risk standpoint, because of the lack of the greater medical infrastructure capability typically associated with larger force deployments.

Soldiers constitute the most fragile and perishable weapons system in the Army's arsenal, and the standard approach to Battle Damage Assessment and Repair (BDAR) of systems doesn't work for Soldiers that are bleeding to death. A tank that has been substantially disabled can be evacuated to the rear, parked in the queue at some maintenance facility, and remain there until the parts come in for someone to get around to repairing the battle damage. It will probably prove no more difficult to repair on the fourth day than it would have been on the second or third. Soldiers are totally different. From the moment of serious injury or wounding, the clock begins to tick and a Soldier's medical condition begins a downward spiral that only accelerates over time. Unlike the disabled tank, the Soldier's condition will only worsen, if the right things are not done at the right time at the right place and in the right sequence. Early intervention and continuous management are required to slow the clock and the spiral until the Soldier can be gotten to the appropriate level of medical care capability at which the problem can be definitively addressed and resolved.

The battlespace in which the future Force XXI warfight is to occur poses unique and difficult challenges for the AMEDD and our counterparts in the other Services, given the aspects of that battlespace's lethality, force dispersion, OPTEMPO, distances, continuous operations, etc. There are different but equally demanding medical challenges presented in many OOTW scenarios. Accordingly, we have begun the exploration of advanced concepts, and have altered our priorities and operational approaches, to address and deal with the challenges as we expect to encounter. In reengineering the AMEDD force for Force XXI and the 21st Century, we are being guided by our AMEDD Battle Rules. While previously cited in Volume I, they are of such import that they warrant reiteration.

AMEDD BATTLE RULES
(Order of Precedence)

MEDICAL PRESENCE WITH THE SOLDIER
("Be There")

MAINTAIN HEALTH OF THE COMMAND

SAVE LIVES

CLEAR THE BATTLEFIELD

PROVIDE STATE-OF-THE-ART CARE

EARLY RETURN TO DUTY

Number one priority is to provide responsive, effective combat
casualty care
On the Battlefield

With respect to the above Battle Rules, we need to remember an absolutely critical point. Within the Combat Service Support (CSS) arena, there is a trend to divest the combat commander of far forward logistical elements and units that could possibly impede his maneuver or otherwise

encumber the warfight. Such elements are apparently to be relocated farther to the rear, providing for a combination of push-pull support from those rearward locations. In taking care of seriously injured or wounded casualties, the AMEDD's number one priority is to "Be There," in order to provide for the earliest possible lifesaving intervention and requisite resuscitative care required to stabilize the casualty, slow the clock, and check the downward spiral. We can not do that in a direct support (DS) or general support (GS) mode from a rearward location, at least not in the timely and responsive manner as is absolutely critical for obtaining a favorable outcome for the Soldier. We have to be part of the combat force, up front and moving with its Soldiers, and present during the engagement to immediately respond to their needs. In fact, our analysis of Force XXI and the characteristics of the battlespace in which it will be employed indicate a requirement to enhance our far forward treatment capabilities to be able to effectively meet the medical needs of the warfighter. If we are not present as part of the fighting force, and fully capable of doing what needs to be done, morbidity and mortality figures are going to go up, with a concomitant increase in the requirement for body bags.

TRADOC Pamphlet 525-5 speaks in terms of Spectrum Supremacy, an aspect of which anticipates the fact that most military operations will be "conducted on a global stage." Isolated tactical operations of even minor scope can turn out to have strategic ramifications, impacting positively or negatively on both the national will and popular support for the entire operation. America's Mothers and Fathers will be watching their Sons and Daughters on CNN, on an almost real-time basis, and they will be affected by what they see and the reports they hear. What the AMEDD does and how well it goes about doing it is going to be subject to scrutiny. That scrutiny needs to clearly demonstrate the fact that the Army and the AMEDD care about, and are fully prepared to take care

of, America's Sons and Daughters who may be placed in harm's way, across the operational continuum.

THE AMEDD AS A SYSTEM OF SYSTEMS

The AMEDD is a multi-disciplinary and multi-faceted collection of medical units and core capabilities that are all interrelated, interdependent and mutually supportive. In reengineering the AMEDD to support Force XXI, we have to critically reexamine the core capabilities associated with each of our ten broad functional areas.

THE AMEDD'S TEN FUNCTIONAL AREAS

HOSPITALIZATION	PREVENTIVE MEDICINE
EVACUATION	COMBAT STRESS
AREA MEDICAL SUPPORT	VETERINARY
MEDICAL LOGISTICS	DENTAL
LABORATORY	COMMAND AND CONTROL

We know that within each of these broad functional areas there are multiple components that contribute to our ability to medically support the warfight. We have to ensure that they are all fully integrated so as to be complementary and mutually supportive. Each area and activity has to positively contribute to a system synergy within which the whole is truly more than the sum of the component parts.

In itself, a tertiary-level hospital is of little value to a Soldier if he dies before he can be gotten there. An elaborate and expensive aeromedical evacuation system capability is of little value to the severely traumatized Soldier if he dies enroute because his condition was not sufficiently stabilized prior to being loaded on the aircraft. Neither the hospital nor the evacuation system are of much value to the Soldier if he dies at the injury site because there were no competent medical personnel present to apply life-saving care prior to the evacuation system's response. Even if the casualty is gotten to the hospital in time for definitive care to be effectively applied, there will be problems in doing so if the hospital's diagnostic medical equipment is not properly calibrated and operable, if no whole blood is on hand, if the surgical supplies for the operating room have been depleted, if there is no anesthesia available, etc. In a similar vein, providing timely and effective primary care at a forward point of service is far more effective than than doing nothing until the Soldier is so gravely ill that he has to be rushed to a tertiary-level hospital, perhaps only to die there because he waited too long to obtain medical treatment for what might have otherwise been a minor medical problem. And the prospective application of sound preventive medicine practices (immunizations, good nutrition, wellness and fitness education, occupational hazard awareness, etc.) are often the most effective means for keeping Soldiers free of disease and injury in the first place.

Just as the Army is preparing for the conduct of joint, interagency, and coalition operations, so must the AMEDD. We have already begun to lay the foundation for providing for the joint medical interoperability, interconnectivity and collaborative teamwork as will be required to support Force XXI as part of a larger joint warfighting force. The following example will serve to demonstrate the kind of joint capability and operational interfaces as are reasonably within our reach by 2013 or sooner.

ILLUSTRATIVE SCENARIO

SETTING: Bosnia-type of IFOR operation involving a tailored Joint Task Force of some 20,000 Army, Marine Corps (USMC), USAF, USN personnel, operating as part of a larger coalition peacekeeping force. Location is a developing nation, with austere medical system infrastructure, poor road network, and unstable situation.

SITUATION: Marine seriously injured in vehicular accident at night in remote location, raining with poor visibility. Massive facial injuries, serious head injury, broken arm and leg, multiple contusions and lacerations. Patient unconscious and alone at scene, heavy bleeding, collapsed lung and respiratory difficulties, falling blood pressure, and on verge of going into shock. Clock is ticking and downward medical spiral has already begun.

SCENARIO: Injured Marine's Personal Status Monitor (PSM) signals alert of medical distress based on change in vital signs. Signal bounced off satellite to USMC leader who determines exact location of injured Marine using Global Positioning System (GPS) and map. Attached USN Corpsman immediately dispatched in armored ambulance, using GPS to get to the exact location, arriving before anyone else is even on the scene. Undertakes life-saving measures and initial treatment -- maintain airway, stop bleeding, start IV, immobilize fracture, treat for shock, etc. USN Corpsman telementored during process by USN emergency physician at Bethesda Medical Center in Washington, DC, via hands-free telementoring system downlink. AMEDD UH60Q requested by Corpsman over interoperable medical communications network and arrives as Marine's condition begins to stabilize, having found location using GPS and advanced navigational and all-weather flying aids. Marine loaded on UH60Q which has linkage directly to Dwight David Eisenhower Army Medical Center (DDEAMC) in Georgia. Marine's condition monitored enroute and additional resuscitative and stabilization actions taken enroute at physician's direction to maintain vital signs at acceptable level. Marine's condition and vital signs, however, worsen due to loss of blood. Aircraft diverts to nearest field hospital facility, which happens to be Air Transportable Hospital (ATH) of USAF. At ATH, tracheotomy performed and chest tube inserted, synthetic blood started, diagnostic tests begun to ascertain extent of actual injuries. Scan of head area digitally transmitted back by satellite from ATH to radiologist at Wilford Hall Medical Center of USAF in Texas. Videoteleconference and consultation among ATH physician, radiologist, and neurosurgeons at DDEAMC and Bethesda confirms diagnosis of slow cerebral bleeding, and need to deal with it soon. Decision made to evacuate Marine to Army Combat Zone Hospital (CZH) having greater diagnostic and operatory capability. ATH physician administers pharmacological stabilization agent developed by Army's Medical Research and Materiel Command (MRMC), which was developed in partnership with academic research centers and pharmaceutical industry. Marine placed in LSTAT (Life Support, Trauma and Transport System) module, developed by MRMC for tri-Service use. Marine placed on USAF C-130, configured for patient transport with intensive care module, and managed enroute by USAF medical staff. On arrival at Army CZH, procedure performed by attending surgeon to relieve cerebral pressure, assisted via teleconsultation in operating room by neurosurgeons at Bethesda, DDEAMC and also Medical College of Georgia. Orthopedist in CZH sets fractures. General surgeon performs immediately indicated facial surgery, assisted by maxillo-facial specialists at Madigan Army Medical Center (MAMC) in Washington and at Duke University Medical Center in North Carolina, who are linked directly into the CZH operating room via videotelemedicine system. Following brief postoperative recuperation, Marine moved by AMEDD UH60Q to USAF aeromedical evacuation staging facility at civilian airfield for strategic evacuation to CONUS. Placed on Boeing 757 from Civilian Reserve Air Fleet (CRAF), equipped with flying ICU module insert, staffed by USAF personnel and flown by commercial pilots. Aircraft lands at CONUS casualty reception facility operated by USAF. Moved subsequently by intra-CONUS DC-9 aeromedical aircraft of USAF to nearest MTF having capability for performing definitive neurosurgical procedure as is still required to stop intracranial bleeding. Surgery performed and patient recuperates until ready for further movement. Case review indicates lengthy period of hospitalization for follow-on

reconstructive surgery, rehabilitation, and recuperation. Decision made to evacuate Marine via DC-9 to DVA hospital nearest to the Marine's home for such follow-on medical care.

OTHER NOTES: At every point along the way in the above scenario: medical supplies as were utilized by all Service elements in treating our Marine were provided by the AMEDD under the auspices of the Single Integrated Medical Logistics Manager (SIMLM) program; expert teleconsultation and assistance was continuously available from both units in the area of operations and from multiple CONUS-based medical power projection/sustainment platforms of the Services, in a split-based mode; our Marine's automated medical record was updated each time medical personnel did anything at any point or location in the scenario, providing for a complete and comprehensive record of treatment; and, our in-transit visibility and tracking of our Marine and his status were maintained on a continuous basis, via an interoperable automated patient tracking system.

The above illustrative scenario constitutes but a rudimentary outline. It could be greatly expanded to include even more participants, system interfaces, and additional examples of cooperative medical activities. It should serve, however, to demonstrate how the AMEDD's own "System of Systems" both can and needs to be tied into an even broader "Systems of Systems" construct that fully integrates the core medical capabilities and activities of the respective Services, other federal agencies, elements of the civilian health care industry, and coalition partners.

FOCUSING ON THE AMEDD'S CUSTOMERS

Beyond the business of delivering health care services, the AMEDD is concurrently involved in the business of developing and delivering both ideas and products as well. An example of the ideas component is instilling in the beneficiary population an understanding and acceptance of the concepts of health and wellness promotion, managed care, and the increased roles and responsibilities of beneficiaries for maintenance of their own health. Examples of the product component relate to the development and acquisition of new medical materiel and products, such as the LSTAT, pharmacological stabilization agents, the PSM, and synthetic blood as mentioned earlier in the illustrative scenario.

As with any business, we in the AMEDD have to be constantly attentive to the needs, expectations, and perceptions of the recipients of the services, ideas, and products we deliver -- our "customers."

We have a multitude of such customers, any listing of which would have to include:

**THE AMEDD'S
"CUSTOMERS"**

Soldiers
Beneficiaries (AD, Retirees, and Dependents)
Assistant Secretary of Defense for Health Affairs
Joint Chiefs of Staff, J-4(Med)
Medical Departments of the USAF and USN
TRICARE Program Lead Agents
Combatant Command Commanders
Major Army Command Commanders
Major Subordinate Unit Commanders
Unit and Installation Commanders
Future Army Leaders in Training
Training and Doctrine Command
Forces Command
Army Materiel Command
Staff Planners, HQDA Level
Reserve Component Units and Personnel

The specific needs, expectations, and perceptions of each of these customer groups can be expected to vary. Accordingly, we have to establish and maintain a two-way dialogue with each. We can not wait for them to come to us and ask about what we are doing and how they might be able to help the AMEDD. We have to reach out to them to solicit their input and hear (rather than just listen to) what they have to say. We then need to analyze the feedback as obtained from them, determine what we should perhaps be doing in light of that feedback, decide how we are going to do what clearly needs to be done, and get on with doing it. We also have to let our customers know what we have done about their feedback or are going to be doing about it and, eventually, assess the impact of what we did and how it served to benefit the customer. As the Army implements Force

XXI, and the AMEDD its piece thereof, the need for continuous, candid and constructive dialogue with all of our various customers will become even more critical. As noted previously, TRADOC has a major role to play as the Army's gatekeeper in the review, approval and prioritization of all routine concept proposals and DTLOMS solution sets. It is, therefore, one of our most important customers beyond the beneficiary populations we serve. As noted in the illustrative scenario, the other Services' medical departments are recipients of services from the AMEDD in a number of areas, to include integrated medical logistics support, rotary wing aeromedical evacuation support, veterinary services support, etc. In turn, we similarly look to the other Services' medical departments, as in the case of the USAF regarding provision of fixed-wing tactical and strategic evacuation support. The medical departments of the USAF and USN are, therefore, two of our most important customers beyond the beneficiary populations we serve. Medical units in the AMEDD Reserve Component (RC) look to us for assistance in helping to maintain their wartime readiness postures. Since almost 70% of the total AMEDD force is in the RC, either the Army National Guard (ARNG) or the United States Army Reserve (USAR), it is essential that we do everything we can so to ensure that they will be ready to stand shoulder to shoulder with us in the battlespace, equally trained and ready to take care of Soldiers. The ARNG and USAR are, therefore, two of our most important customers beyond the beneficiary populations we serve. Similar comments could be made about all the other customer groups cited above, and a number that were not included on the list. The point is that all of our customers are important, for varied reasons, and we have to be sensitive to the needs, expectations, and perceptions of each and every one of them.

BUILDING A BLUEPRINT FOR THE FUTURE

The next two decades are going to be characterized by continuous scientific and technological advances, interspersed with periodic break-throughs and leap-ahead developments. The AMEDD must be prepared to effectively deal with the changes as will invariably arise from those advances. With those changes will come not only challenges but opportunities. We must anticipate the challenges and deal with them on a proactive basis. We must seek to capitalize on the opportunities, so as to enhance combat casualty care, patient access, quality of care, cost-effectiveness, and business practices. Such requires that we be creative and anticipatory, as well as proactive and adaptable. It requires that we "think outside of the box," looking beyond what is being done in the present to what could and should be done in the future. We have to be able to recognize when we need to make changes to capitalize on opportunities, and neither be timid nor recalcitrant in doing so. In short, we have to be constantly be looking for new ideas and better ways of doing things, and identifying the value-added benefits to be derived from effectively implementing them.

Unfortunately, we are going to be faced with operating in a fiscally constrained environment, and simply will not have the resources to underwrite and implement every good idea. In this respect, we are going to have to focus our constrained resources on those ideas and program initiatives that will serve to offer the greatest value-added benefits, in light of requirements relating to the AMEDD's essential core competencies and capabilities. We are going to have to prioritize all of the AMEDD's programs and efforts, consciously shifting resources from those that have marginal value or benefit to those that are deemed to be of greater importance. We can not continue to take a

"salami slice" approach to cutting here and paring there, as such typically serves to only degrade capabilities across the board.

We will be expected, and required, to defend our concepts and initiatives if we expect them to effectively compete for funding. We will have to clearly and cogently demonstrate how they serve to add value to a Force XXI power projection Army and the future warfight. The more objectively and empirically we can do that, the more likely our concept and initiative proposals are going to be favorably considered and supported. We must, of necessity, integrate the AMEDD more fully into the Force XXI process of experimentation and validation. We must work more closely and effectively with TRADOC and its Battle Labs in that regard, as TRADOC is the gatekeeper in the concept development business.

The Enhanced Concept Based Requirements System (ECBRS) process provides the framework for translating concepts into operational capabilities, in a systematic, integrated and comprehensive manner. We need to adhere to that process in formulating each AMEDD concept proposal. We must ensure that, of the alternative DTLOMS solution sets developed for each proposal, we select the one that is both the most cost-effective and will contribute to achievement of the capability as required. We must further ensure that it serves to identify all requirements and has been fully crosswalked across the DTLOMS domains.

We must maintain our momentum in planning for our future as the AMEDD, but we can not do so on a unilateral basis or in a vacuum. What we propose to do regarding our future needs must be considered within a broader context that is inclusive of the military, federal, national, and

international health care arenas. Future missions of the Army are less likely to involve unilateral than multilateral operations. In this regard, we need to expand our conceptual construct of interoperability and collaboration to provide for greater inter-agency, multi-national, and civilian health care interfaces and dialogue.

We must promote and institutionalize the concept of a Total AMEDD Force (TAF), in which the efforts and activities of both the Active and Reserve Components (AC/RC) of the AMEDD are fully integrated, coordinated and mutually supportive. The RC, comprising some 70% of the TAF, are critical to our being able to effectively support a Major Regional Conflict (MRC), and they have to be ready to go when required. We must ensure that we establish and maintain the necessary communications, dialogue and cooperation to provide for a total team effort within the TAF. We must ensure that the RC are both included and participate as full partners in the sharing of information, ideas, experiences and expertise on an open and candid basis.

In a similar vein, we must work with ASD(HA), the Lead Agents and our Service counterparts to provide for a cohesive MHSS in which competition and parochialism are supplanted by collaboration, teaming and sharing. The illustrative scenario as previously presented should serve to demonstrate just how interrelated and interdependent our operations have already become. We must do our part in the AMEDD to advocate and promote achievement of an even greater degree of interoperability, cooperation, and mutual support. We must also contribute to a shared sense of concern and responsibility for the well-being and support of all eligible beneficiaries, whatever their Service affiliation. We can also learn much from the civilian health care industry and they from us. Such is especially the case in the area of medical research and development, where substantial

potential exists to benefit from spin-off and dual-use technologies that have been developed via a collaborative approach with academia and industry. With respect to probable coalition partners, there are potential benefits to be derived from exploring the development of multinational medical support concepts, common doctrine, parallel organizational designs, standardized medical materiel, compatible operational fits, and information management interoperability.

In short, we can not be so arrogant as to presume that our vision and plans are the only ones that count. We have to embrace a much broader and more holistic perspective, one based on engagement and collaboration, rather than parochialism and competitiveness.

KEY STRATEGIES IN IMPLEMENTING THE VISION

Our Vision of the AMEDD of the future is:

A WORLD CLASS SYSTEM...

FOR TOTAL QUALITY HEALTHCARE IN SUPPORT...

OF AMERICA'S ARMY AT HOME AND ABROAD...

ACCESSIBLE TO THE TOTAL ARMY FAMILY...

ACCOUNTABLE TO THE AMERICAN PEOPLE.

In bringing this vision to fruition, we have focused on 13 Key Strategies, with respect to each of which we have identified a number of supporting goals and objectives. Those 13 Key Strategies are, respectively, addressed at Tabs 1-13 at Appendix A, along with their associated goals and objectives. This Section provides the overarching statement of each Key Strategy:

KEY STRATEGY # 1

Provide for a synergistic medical command and control (C2) infrastructure that can effectively orchestrate and crosswalk the provision of comprehensive health services support -- both vertically and horizontally within and between all echelons from foxhole to CONUS, across the operational continuum, and in support of joint, multinational and interagency operations.

KEY STRATEGY # 2

Provide for a vibrant and adaptable Learning Organization within which people desire to serve and to which they are proud to belong.

KEY STRATEGY # 3

Provide for a world-class military-civilian team that is highly motivated, and is led by skilled and dynamic leaders who excel in a joint and multinational environment across the operational continuum.

KEY STRATEGY # 4

Provide for comprehensive, world-class health services support to America's operational (TOE) Army, on a global basis across the operational continuum from war to OOTW.

KEY STRATEGY # 5

Provide for a world-class managed care delivery system that optimizes access, quality and cost-effectiveness, and becomes the preferred system of choice for all eligible beneficiaries.

KEY STRATEGY # 6

Provide for a world-class medical logistics support system that ensures the global availability of medical supplies and materiel whenever and wherever needed by the Army and other designated customers.

KEY STRATEGY # 7

Provide for a world-class medical evacuation system that is responsive, effective, and fully integrated on a joint basis.

KEY STRATEGY # 8

Provide for a world-class medical training base that is relevant for today's AMEDD and continues to remain so into the 21st Century.

KEY STRATEGY # 9

Provide for a robust, world-class medical research and development capability to capitalize on scientific and technological advances that will benefit the Army and eligible beneficiaries.

KEY STRATEGY # 10

Provide for greater interconnectivity, collaboration and mutually beneficial sharing within the MHSS, among other federal agencies' health systems, and with respect to the private health care industry within the U.S. and the health systems of friendly nations.

KEY STRATEGY # 11

Provide for the consistent maintenance of a high state of go-to-war readiness on the part of both AMEDD units and individuals of all components, and the achievement of a high degree of personal medical readiness throughout the Army.

KEY STRATEGY # 12

Provide the AMEDD's customers and publics with an understanding and appreciation of the value-added benefits of health services provided by the AMEDD and the MHSS.

KEY STRATEGY # 13

Provide for the timely and effective crosswalk between planning and programming activities and processes to ensure the adequate resourcing of essential AMEDD capabilities under the Army and DHP POMs.

BRINGING THE VISION TO FRUITION

Building the AMEDD of the future is akin to building a house. Once the foundation is laid, we can still make some changes as the house goes up, to the extent that the finished product may have a substantially altered appearance. We could apply stucco or siding, add or delete windows, or even modify the roofline. We get into problems when we decide to add a room as an afterthought or shift loadbearing walls, because we did not design the foundation to accommodate those kinds of

structural changes. So it is with respect to our blueprint for the AMEDD's future vision. We want to be fairly confident that we are laying an adequate visionary foundation upon which we can build a solid operation, but still provide for the flexibility to make subsequent changes that are seen as being needed.

In the aggregate, the three volumes of this White Paper constitute a strategic planning document that articulates the vision and lays out a blueprint for bringing it to fruition through pursuit of 13 supporting Key Strategies. Fully pursued, those Key Strategies will contribute to the laying of a sound foundation. The respective goals and objectives relating to the Key Strategies are intended to provide insights and descriptive guidance as to the actions anticipated to be required in support of Key Strategy implementation.

As a strategic planning document, this White Paper is of little value if it is simply reviewed and placed on the shelf to collect dust with other seldom used references. It is of no value if the essential follow-on work is not undertaken to: develop the requisite supporting action plans (with specific action initiatives and milestones) to implement the Key Strategies; and, program for the necessary resources with which to underwrite the supporting action plan and related initiatives as identified. Planning without programming is rhetoric, rather than substance. Supporting action plans serve to translate the broad vision and descriptive planning guidance into specific and definitive courses of action against which resources can be applied. The action plan serves as the link between ideas and realities.

Accomplishing the crosswalk between planning and programming is critical, since much of what needs to be done to bring the AMEDD's vision to fruition will have to be underwritten by elements external to the AMEDD, via the Army, other Service, and DHP POMs. It would neither be appropriate nor affordable were the AMEDD to unilaterally absorb the underwriting of many of the initiatives as would be required in support of the Key Strategies. Unless the AMEDD identifies and formally submits such resourcing requirements to those respective elements for incorporation into their respective POM submissions, however, there will be no resources made available. It is essential, therefore, that the necessary work be undertaken as expeditiously as possible to identify those resource requirements as would be necessary to move from planning to implementation.

MARKETING THE VISION AND IMPLEMENTING PLAN(S)

Marketing is not just selling, although many view the two as being synonymous. In its simplest sense, marketing is the business of establishing a dialogue and communicating a message, its purpose being to provide a target audience with visibility regarding some idea, product, or service as is being proffered. Such visibility generates awareness and, if the message is both effectively conveyed and properly absorbed, leads to an appreciation of the value of the idea, product or service on the part of the target audience.

The AMEDD's strategic vision constitutes an idea, with respect to which the AMEDD needs to build an appreciation as to its value and importance -- to Soldiers, the Army, ASD(HA), other Services, etc. That appreciation needs to be instilled on the part of all internal and external activities that could potentially have a direct or indirect role to play in supporting the advancement

of the idea. Such is especially the case with respect to those activities that would be involved in providing the resources with which to support implementation of any initiatives relating to the idea.

Development of a broadly based understanding and appreciation of what the AMEDD is aspiring to achieve via its strategic vision and plan serves to build consensus as to its importance and worthiness. Achievement of a favorable consensus contributes, in turn, to greater involvement and support on the part of other activities regarding the AMEDD's vision and implementation plan, and the specific initiatives relating to their accomplishment. In the final analysis, it is the positive involvement and support of other key external elements that the AMEDD is seeking to solicit. Such will be achieved only if the message relating to the idea is conveyed.

There is no cause for apology or embarrassment about marketing the AMEDD's vision and implementing plans, because what they entail is the business of taking care of the Army's most precious commodity and its ultimate weapon -- Soldiers.

CLOSING COMMENTS

The AMEDD has reaffirmed its defining vision for the future and, through the identification of its Key Strategies and associated goals and objectives, has set the azimuth to be followed in bringing that vision to fruition. The AMEDD's vision is oriented on, in consonance with, and supportive of the Army's broader vision as embodied in Force XXI and the doctrinal construct of Full Dimensional Operations. Concurrently, The AMEDD vision is consistent with and supportive of the shared vision, and related goals and strategies, of the Military Health Services System.

The vision and Key Strategies are descriptive rather than prescriptive, providing for insights and directional thrusts around which to frame more specific program efforts and initiatives. In this regard, it establishes the necessary constancy of purpose to guide long-range efforts while simultaneously providing for the flexibility to adjust to changing circumstances in the near term.

The challenge now lies in the doing. The task at hand is to translate our vision and Key Strategies into more specific implementation plans and milestone targets, in light of which budgetary and programmatic actions can be undertaken. Given that, the challenge will be to provide for the follow-through to keep our efforts on track and maintain momentum.

Hence, to work.

APPENDIX A
TAB 1
Goals and Objectives

KEY STRATEGY #1

Provide for a synergistic medical command and control (C2) infrastructure that can effectively orchestrate and crosswalk the provision of comprehensive health services support - both vertically and horizontally within and between all echelons from foxhole to CONUS, across the operational continuum, and in support of joint, multinational and interagency operations.

Enhance the effectiveness of the AMEDD C2 infrastructure in both TOE and TDA units at all echelons in all components

- Define core outputs and operational capability requirements for each type AMEDD C2 unit
- Organize AMEDD C2 units' processes and structures in light of core outputs and operational capability requirements
- Identify core competency requirements for each position within AMEDD C2 units, of all components in both TOE and TDA
- Ensure sufficient staffing capability to support sustained, high OPTEMPO across the continuum of operations
- Capitalize on current and emerging technologies to maximize productivity and effectiveness, and minimize staffing
- Assess impact and practical potential of split-based operations in the area of AMEDD C2
- Identify and document requirements of AMEDD C2 units for staffing representation from other Services, allies or agencies
- Identify and document special augmentation requirements (e.g., translators) for AMEDD C2 units in all components

Develop a comprehensive communications architecture, strategy and implementation plan for the Total AMEDD Force to acquire a robust, seamless and assured medical communications capability within the global communications architecture and infrastructure of the Army and DOD systems

- Identify and validate all communications capability requirements, for all AMEDD TOE and TDA units at all echelons
- Determine and validate interoperability/interconnectivity requirements for AMEDD linkage to other Services, allies and agencies
- Address all voice, text, data, video, telemetry, position locator, navigation, etc. capability requirements, by unit and platform
- Develop master schematic displaying all AMEDD communications linkages and modalities, foxhole to CONUS
- Identify and ensure incorporation of programmatic requirements into appropriate Army, DHP, and other Service POMs
- Develop an acquisition strategy to field required communications capabilities as soon as possible, by force package priority
- Ensure crosswalk of communications strategy/plan with information management strategy/plan

Develop a comprehensive information management (IM) architecture, strategy and implementation plan for the Total AMEDD Force to acquire a robust, seamless, assured and interoperable medical information system to support both peacetime and operational requirements on a global basis

- Support and provide for consistency with the Army Enterprise Vision and Implementation Plan
- Ensure compatibility with Army and DOD information architectures and systems under development or as are anticipated

- Identify and provide for meeting of data standardization requirements
- Determine requirements regarding transmission of medical information and data via "secure" versus "in-the-clear" modes
- Ensure appropriate interoperability/interconnectivity with other Services, allies, and agencies
- Develop master schematic displaying all information management linkages, foxhole to CONUS
- Identify and ensure incorporation of programmatic requirements in appropriate Army, DHP, and Service POMs
- Develop an acquisition strategy to field requisite IM capabilities as soon as possible, by force package priority
- Ensure crosswalk of information management strategy/plan with communications strategy/plan
- Provide for a professional and adequately sized IM workforce of military/civilian personnel in the AMEDD

APPENDIX A
TAB 2
Goals and Objectives

KEY STRATEGY #2

Provide for a vibrant and adaptable Learning Organization within which people desire to serve and to which they are proud to belong.

Complete the institutionalization of a learning organization philosophy and approach throughout all components of the AMEDD

- Promote participation, openness and communication at and among all levels throughout the AMEDD
- Foster collaboration and candid sharing of ideas, knowledge, expertise and experiences
- Increase availability and flow of information via electronic means (VTCs, e-mail, etc.)
- Promote innovation, experimentation and prudent risk-taking
- Accommodate evolutionary change through a "rolling baseline" approach

Focus on key outputs at each echelon of AMEDD activity, and the supporting core competencies, essential capabilities, and supporting processes relating thereto

Focus on performance objectives, outcomes and value-added benefits to be derived in all functional endeavors throughout the AMEDD

Make the AMEDD an organization in which individuals desire to serve and live

- Promote quality of life programs
- Improve working and living conditions
- Foster positive interpersonal relationships and dialogue
- Promote an environment that values and manages cultural diversity and is free of harassment and discrimination
- Be sensitive and attentive to individual needs, perspectives and aspirations
- Foster pride of ownership, participation and accomplishment by all AMEDD personnel in all components
- Encourage personal and professional growth on the part of all AMEDD personnel -- AC, RC, and civilian
- Institutionalize Army Community of Excellence program standards at all AMEDD installations and activities

Enhance appreciation of and adherence to enduring institutional values throughout the AMEDD

- Reiterate enduring values in all AMEDD leadership programs

Promote a Total AMEDD Force (TAF) team concept that transcends components, organizational boundaries, and disciplines

Complete the institutionalization of a viable TQM architecture and program that ensure the maintenance of a customer focus and commitment to excellence at every endeavor

Make the recognition and reward of excellence a habit

Meet or exceed the highest level of employee satisfaction within a government agency

APPENDIX A
TAB 3
Goals and Objectives

KEY STRATEGY # 3

Provide for a world-class military-civilian team that is highly motivated, and is led by skilled and dynamic leaders who excel in a joint and multinational environment across the operational continuum.

Develop and maintain a comprehensive AMEDD Leader Development Master Plan that is in consonance with the Army Leader XXI Campaign Plan, and addresses both civilian and military leader development program requirements

Produce competent, confident and adaptive leaders through a quality AMEDD leadership and executive development program, supporting both military and civilian personnel in all AMEDD components

- Instill in all AMEDD leaders a strong professional ethic and commitment to enduring values
- Increase computer literacy and ability to apply information management technologies
- Enhance ability to orchestrate multifaceted health service support operations across the operational continuum
- Improve cognitive skills and ability to adapt and improvise, based on situationally dependent analysis
- Provide tactically realistic and operationally challenging leader training through exercises and simulations

Develop special skills and abilities on the part of AMEDD leaders

- Increase knowledge of other Services' medical departments and how they are organized and operate
- Develop adeptness, competence and confidence in dealing with joint, interagency and multinational operations
- Improve ability to comprehend and move deftly through the three levels of war
- Increase foreign language proficiency on the part of AMEDD leaders
- Enhance understanding of and sensitivity to other cultures
- Impart knowledge of managed care concepts and techniques, to include demographic analyses and capitation budget planning

Provide for the sequential and progressive development of AMEDD leaders

- Employ an optimal mix of resident and distance learning modalities
- Increase individual's involvement through a structured program of continuous self-study and professional development
- Manage career assignments to provide for operational experiences that contribute to leader development

Achieve support of a policy for selecting the best and brightest individuals to fill key AMEDD positions on a branch immaterial basis

- Identify AMEDD TOE/TDA branch immaterial positions
- Define requisite skills, knowledge and behaviors (SKB) for each TOE/TDA branch immaterial position within the AMEDD
- Implement a viable program for sequentially and progressively preparing AMEDD personnel to fill branch immaterial positions

Improve the AMEDD's ability to target, reach, and recruit high quality military and civilian personnel

Participate with ASD(HA) in development of a mechanism to ensure DOD-wide minimum competency levels for unique specialty areas

Participate with ODCSPER in simplifying the civilian personnel system to provide for greater flexibility in managing the DAC work force to meet operational requirements

Be the Army benchmark for the retention of military and civilian personnel

- Reduce personnel turbulence and turnover
- Reduce costs of recruiting and training new people

Identify and secure support of special compensation and other financial incentives to increase recruitment and retention of individuals whose skills are in high demand in the civilian health care sector

Maximize the effective utilization by the AMEDD of civilians (DAC, contractors, etc.) in light of Force XXI and in support of both CONUS/OCONUS operations

- Identify and refine Force XXI requirements for civilians to support mobilization of CONUS base activities
- Identify requirements for employment of civilians in support of OCONUS operations

Collaborate with OCAR/NGB to increase Full Time Staffing (FTS) positions within AMEDD units of the RC

Examine the need for and feasibility of further consolidations in AMEDD MOSCs and AOCs, and with respect to which make/buy decisions need to be made

APPENDIX A
TAB 4
Goals and Objectives

KEY STRATEGY # 4

Provide for comprehensive, world-class health services support to America's operational (TOE) Army, on a global basis across the operational continuum from war to OOTW.

Provide for the development, validation and maintenance of viable casualty rates, applicable to the full range of potential operational scenarios and environments

- Develop, validate and maintain relevant DNBI rates
- Assist ODCSPER in development, validation and maintenance of relevant WIA rates

Participate in the development of planning factors for 2nd through 5th echelon medical facilities, based on Time, Task and Treater clinical data bases; maintain the currentness of extant data bases

Participate with ASD(HA) and J-4(MED) in developing a mechanism to more effectively assess and display medical requirements and capabilities for combatant commanders, Services and the Joint Staff

Promote development of automated simulation capabilities for prospectively modeling and assessing the impact of employing various medical concepts, force structures and mixes, casualty rates, etc.

- Develop medical modules and excursions for all wargaming simulations that support modeling

Fully integrate the AMEDD into the Battle Lab Program of TRADOC, to promote exploration and development of medical support concepts for the Army as it transitions into Force XXI and beyond

- Identify medical OCRs based on medical threat and future battlefield requirements
- Promote innovation and creative change on an accelerated basis
- Employ Integrated Concept Team approach to rigorously examine and verify efficacy of proposals
- Validate and demonstrate value-added benefits to be realized
- Pursue establishment of a dedicated Health Services Battle Lab with joint medical staff and capabilities
- Designate qualified AMEDD staff in support of each TRADOC Battle Lab

Reengineer the AMEDD's operational (TOE) force to support Force XXI as it evolves

- Adhere to force design principles to build an AMEDD force that is consistent with characteristics of Force XXI
- Apply new technologies and clinical regimens to reduce bed requirements without increasing morbidity or mortality
- Provide for greater flexibility, modularity and tailorability in force structure designs
- Increase strategic deployability and mobility by decreasing weight and cube
- Design a single, digitized Combat Zone Hospital (CZH) structure that is readily adaptable to meet OOTW requirements
- Develop augmentation teams and equipment sets to support OOTW, humanitarian, and disaster relief missions
- Incorporate split-based operational concepts to enhance medical capabilities without increasing the medical footprint
- Achieve an optimal mix of AC and RC forces
- Investigate the feasibility of utilizing RC personnel to round-out TOE AC hospitals
- Investigate the feasibility of employing a "carve-merge" approach to integrating TOE and TDA AMEDD units

- Design AMEDD units to be more self-sufficient and less resource consuming (water, fuel, oxygen generation, REFLUPS, etc.)
- Balance design of the AMEDD force within the context of the Army's Six Fundamental Imperatives
- Ensure ability to accommodate mix of digitized and non-digitized medical units
- Ensure the effective identification and integration of all DTLOMS requirements relating to force design reengineering

Develop doctrinal references in support of Force XXI that address the full spectrum of AMEDD operations within the context of Full Dimensional Operations, to include the CONUS base

- Revise or produce new doctrine that is descriptive rather than prescriptive in nature, and emphasizes situational awareness
- Embed emerging, but mature, doctrine and TTP
- Develop descriptive doctrine specifically governing medical support communications and information management
- Accommodate doctrinal integration of digitized and non-digitized medical units
- Provide for ready access to doctrinal references via electronic linkage to a common data base that is available to all
- Leverage CTC O/Cs for insights relating to operational requirements and doctrinal needs
- Expand available base of doctrinal Subject Matter Experts (SME) through electronic networking

Participate in the development (as lead, or in support) of doctrinal references governing medical operations on a joint, multinational and interagency basis

Develop conceptual construct for employing selected MTFs as power projection/sustainment platforms in direct support of deploying and deployed forces

- Participate in Army effort to develop installation doctrine relating to power projection/sustainment activities
- Develop supporting processes to implement concept of MTFs as power projection/sustainment platforms
- Provide for electronic linkage between power projection/sustainment MTFs and deployed forces
- Routinely train, exercise, and test MTF power projection/sustainment processes

Complete required implementation plans for which the AMEDD has Primary Action Office (PAO) responsibility under MRSP-2001, and future revisions thereof

Participate in future revisions of FM 100-5 and TRADOC Pamphlet 525-5 to add narrative that more fully reflects the role and contribution of health services support in Full Dimensional Operations

APPENDIX A
TAB 5
Goals and Objectives

KEY STRATEGY # 5

Provide for a world-class managed care delivery system that optimizes access, quality and cost-effectiveness, and becomes the preferred system of choice for all eligible beneficiaries.

Fully transition to a health and fitness-focused, primary care based managed care system

- Shift emphasis from acute, episodic care and catastrophic hospitalization to prevention and primary care
- Reallocate resources from inpatient to outpatient and preventive health services
- Improve health of beneficiary population and thereby reduce demand for services
- Reduce incidence of preventable disease

Develop a comprehensive Army Health Promotion Program to ensure the Army's soldiers are healthy and fit, capable of deploying into and functioning in the most physically and mentally demanding of operational scenarios

- Promote wellness, fitnesses and injury/illness avoidance
- Enhance ability to effectively manage mental and physical stress
- Reduce health risks and undesirable life style behaviors that negatively impact on good health
- Implement a comprehensive medical surveillance program
- Maximize the personal medical readiness deployability posture of soldiers

Increase role and involvement of beneficiaries in promoting their own health

- Expand knowledge regarding injury/disease avoidance
- Provide ready access to relevant medical information to better educate the beneficiary population
- Enhance ability of beneficiaries to recognize and effectively manage minor medical problems on a self-care basis

Reengineer the Institutional/TDA AMEDD

- Define core outputs and operational capability requirements/expectations of each type TDA unit of the AMEDD
- Reengineer supporting processes and organizational structures in light of core outputs and organizational capabilities
- Pursue outsourcing where such is feasible and will not serve to degrade readiness, access or quality
- Achieve program efficiencies through appropriate make/buy decisions
- Close, downsize or merge marginal medical facilities in light of Army BRAC decisions
- Reduce duplication in services that are readily available from the civilian sector at reasonable cost and comparable quality

Ensure cost-effective utilization of all available resources

- Instill an acute sense of resource husbandry
- Achieve maximum value-added benefit for the investment of resources
- Implement case management programs for high risk category patient conditions
- Improve appropriateness of inpatient utilization to achieve national standards
- Achieve demonstrable, quantifiable cost savings in operations
- Increase provider productivity and efficiency through application of information age technologies

Ensure ease of patient access

- Increase managed care entry portals

- Increase number of primary care physicians to supported beneficiary populations
- Expand number and use of physician extenders
- Provide voice/electronic access to medical consultation and information to obviate clinic visits where possible
- Exceed ASD(HA) standards of access for TRICARE population

Ensure maintenance of high quality health care services as provided

- Increase number of board certified physicians
- Increase use and effectiveness of quality management techniques
- Meet evolving standards of care as established by national accrediting bodies
- Reduce patient safety/risk management facility problem areas

Achieve and maintain a high level of customer satisfaction

- Improve customer relations skills on the part of all AMEDD personnel
- Establish viable customer feedback mechanisms and procedures for acting on feedback as obtained
- Increase beneficiary-provider collaboration and meaningful dialogue

Achieve and sustain a stable business environment, empowering commanders at all echelons to optimize the utilization of available resources to accomplish their respective missions in the most efficient and productive manner possible to maximize access, quality, and cost-effectiveness

- Provide broad, descriptive doctrine to guide TDA medical activities' operations
- Clarify functional roles, responsibilities, and authority via revision of MEDCOM Reg 10-1
- Provide requisite planning tools and data, e.g., beneficiary demographics, provider profiles, utilization patterns, etc.
- Complete shift to capitated budgeting based on an enrolled population
- Develop uniform guidelines for AMEDD-wide employment of performance plans and reviews, in light of goals and objectives
- Develop common performance standards and metrics for application across common functional areas and activities
- Develop meaningful metrics for assessing the extent to which units' performance goals and objectives are being met
- Centralize common managerial, developmental, and administrative support services to achieve positive economies of scale
- Decentralize operational management and empower local commanders to optimize health care delivery services
- Promote improvisation, innovation, and experimentation to identify and exploit best business practices at points of service
- Fix accountability for quality of performance, achievement of outcomes, and resource utilization
- Hold local commanders accountable for performance and resource utilization

Support the effective implementation and management of the TRICARE program

- Program for full implementation of regionalized TRICARE Managed Care Support Contracts as applicable
- Develop and implement health care utilization management plans in conjunction with those of Lead Agents
- Promote close collaborative working relationship among Lead Agents, HSSAs, and MTFs

Enhance the dental health of the Army

- Increase percentage of AC personnel categorized as Class 1 or 2
- Support scheduled employment of the Defense Dental Standard System
- Participate in implementation of a uniform dental records system

Provide for world class medical treatment facilities

- Develop an investment strategy for the sustainment, renewal and replacement of medical facilities
- Maximize the effective utilization of facilities to support medical readiness and health care delivery

Develop environmental health and preventive medicine concepts and programs that are supportive of Army environmental policies and objectives

Support Army efforts and objectives relating to management of AMEDD installations and activities

- Improve installation-level business functions and practices
- Pursue community, interservice, and interagency partnerships in the areas of facilities and services
- Identify areas and functions for which outsourcing would prove a viable alternative to in-house military or civilian staffing
- Implement evaluation methodology to measure the effectiveness of BASOPS support at AMEDD installations
- Reduce energy consumption to meet established Army guidelines
- Reduce leased facility use and consolidate activities into government owned facilities
- Ensure revitalization of AMEDD facilities on a regular periodic basis appropriate to the type of construction
- Participate actively in the Whole Barracks Renewal Program of the Army

APPENDIX A
TAB 6
Goals and Objectives

KEY STRATEGY # 6

Provide for a world-class medical logistics support system that ensures the global availability of medical supplies and materiel whenever and wherever needed by the Army and other designated customers.

Develop and maintain a comprehensive strategy and implementation plan for building and sustaining a seamless medical logistics infrastructure and capability to accommodate current and future AMEDD needs on a world-wide basis, to include provision of medical logistical support services to other Services, multinational, and interagency forces as directed

- Integrate planning efforts with those of the Logistics TRIAD
- Model plan on the ASLP, focusing on the Army strategic logistics objectives and system characteristics outlined therein
- Ensure plan is in consonance with the TAP, ASLP, AMP, STMP, RDAP, etc.
- Provide for continuous improvements through technology insertion, technological enhancements, and digitization
- Ensure provision of a total medical distribution system from source to user
- Provide for the ability to support no-notice power projection operations

Provide for a global medical logistics information management system that supports both peacetime and wartime requirements and is compatible with Army/Joint information management requirements

- Provide for real-time Total Asset Visibility (TAV) and in-transit visibility (ITV) of all medical supplies and materiel
- Develop common baselines for computing medical logistics sustainment requirements
- Improve ability to forecast requirements for medical supplies and materiel
- Provide for tri-Service, multinational, and interagency interoperability, interconnectivity, and standardization

Expand the Prime Vendor Program (for both pharmaceutical and other Class VIII supplies) to approach a "just-in-time" delivery objective, consistent with a prudent degree of risk

Implement a formal concept and approach for the timely accomplishment of biomedical maintenance and repair, and retrograde and return, of medical materiel on a global basis

- Formulate an overarching biomedical maintenance system construct that is consistent with the Standard Army Maintenance System
- Clarify procedures for accomplishment of unit, DS, GS and depot levels of biomedical maintenance repair
- Develop tailored PLLs and ASLs to support biomedical maintenance operations at all echelons
- Develop mechanism for maintenance of an ORF to support immediate replacement of essential medical materiel
- Incorporate embedded diagnostic capability in all new medical materiel and systems, wherever practicable
- Provide for a global telemaintenance capability and electronic linkage between the CONUS base and deployed forces

Develop a concept for the provision of split-based medical logistics support services between the CONUS base and forward deployed forces of all AMEDD customers

Investigate the feasibility of employing civilians (DACs, contractors, vendors, etc.) to provide selected medical logistics services, within CONUS and at OCONUS locations in support of deployed forces

Revitalize Industrial Preparedness Planning (IPP) to identify medical logistics production base surge capabilities and sources to meet wartime contingency requirements

- Develop approaches for procuring "military intensive" items that can not be routinely supported by the civilian industrial base
- Establish "End Item/Production Specific" Decentralized Blanket Purchase Agreements (DBPAs)
- Develop measures and contractual arrangements to support provision of critical medical items and preserve defense capabilities
- Develop and resource consignment contracts for initial load requirements to support short-notice contingency deployments
- Establish procedures for contingency support from civilian distribution channels to replace/rotate dated and deteriorative materials

Finalize a viable approach for implementation of the Single Integrated Medical Logistics Manager (SIMLM) concept, within the context of the Defense Medical Logistics Standard Support System

- Identify all DTLOMS requirements to support SIMLM implementation
- Determine requirements/impacts as can be anticipated relative to medical logistics support of multinational/interagency operations
- Identify specific, definitive requirements relating to communications and automation interoperability and connectivity
- Validate and refine SIMLM concept through experimentation
- Ensure the programming of required resources in the Army, DHP and Service POMs to implement SIMLM
- Revise joint medical logistics doctrine in light of SIMLM implementation
- Incorporate SIMLM logistics play in all joint exercises and simulations

Develop plans for the prepositioning (ashore, afloat, and in CONUS) of medical supplies and materiel to effect rapid response in support of operational requirements, from war to OOTW

- Provide for sufficient medical war reserve stocks to meet operational requirements of two nearly simultaneous MRCs

Participate in the identification and application of innovative approaches for otherwise enhancing and streamlining medical logistics support operations, in consonance with ASLP initiatives

- Establish a comprehensive benchmarking program to measure system performance, in light of peacetime/wartime requirements
- Field standardized, modernized logistics systems designed to support both peacetime and operational requirements
- Improve horizontal and vertical communications and flow of medical logistics information within and across all echelons
- Identify and capitalize on most successful business practices from the civilian sector
- Outsource non-core medical logistics operations where feasible
- Reduce sustainment and support requirements, logistical footprint, and inventories

APPENDIX A
Tab 7
Goals and Objectives

KEY STRATEGY # 7

Provide for a world-class medical evacuation system that is responsive, effective, and fully integrated on a joint basis.

Develop a comprehensive strategy and implementation plan for building and sustaining a modernized, seamless medical evacuation system (ground and air) to support current and future AMEDD requirements across the operational continuum, to include provision of evacuation support to joint, multinational and interagency operations as required

Quantify resource requirements (platforms, staff, communications, support equipment, etc.) necessary to provide aeromedical evacuation support to other Services as is being proposed or has been tasked to the Army

Modernize air and ground medical evacuation platforms

- Field UH60Q to replace UH1 aeromedical evacuation aircraft
- Field new generation armored ambulance to replace M113 evacuation vehicle

Modernize evacuation platform communications, to provide for voice and electronic linkages with supported and supporting units, across Service lines where required

- Identify Global Positioning System and navigational capability requirements
- Determine data and telemetry transmission capability requirements
- Address ship-to-shore and other Service-specific capability requirements

Participate in the joint development of a standardized and interoperable system for certifying, procuring, maintaining, tracking and recovering Patient Movement Items (PMI)

Participate in the development of joint CONUS casualty reception and distribution plans and intra-regional evacuation methodologies

Participate in the development and establishment of a Theater Patient Movements Requirements Center

Participate in the development of joint concepts and doctrinal references governing operation of a fully integrated, interoperable, and seamless medical evacuation system, from foxhole to CONUS

Provide for real-time, in-transit visibility and tracking of patients within the evacuation system, on an individual basis

Provide for enhanced enroute management and sustained stabilization of patients over longer evacuation distances involving greater periods of time

- Determine the enhanced skills and knowledge required of evacuation platform attendants and achieve that level of skill capability

- Field the Life Support, Trauma and Transport System (LSTAT)
- Provide for enroute, hands-free teleconsultation/telementoring linkage between evacuation platform and supporting medical unit(s)
- Investigate the feasibility of developing and employing pharmacological stabilization agents

APPENDIX A
TAB 8
Goals and Objectives

KEY STRATEGY # 8

Provide for a world-class medical training base that is relevant for today's AMEDD and continues to remain so into the 21st Century.

Develop and maintain a comprehensive AMEDD training strategy and implementation plan that is consistent and compatible with the Warrior/Warfighter/Warner XXI strategies and initiatives of TRADOC, and serves to effectively integrate unit, institutional, and self-development training activities throughout all AMEDD components

Participate with TRADOC in its development and implementation of those training strategy initiatives that harbor significant impact or resource ramifications for the AMEDD, and into which AMEDD requirements should be fully integrated; such specific initiatives include:

- Evolution of the Total Army School System (TASS) concept
- Application of current and future CATS strategies in AMEDD units and schools
- Establishment of an Army Training Digital Library (ATDL)
- Distance Learning/Classroom XXI/"Wall-less" Classroom initiatives (e.g., VTT, SEN, TNET, etc.)
- ASAT and AIMS-R initiatives and resource requirements relating thereto
- Consolidation, integration and standardization of medical training in AC/RC schools
- System for estimating/validating resource requirements in support of resident/non-resident institutional training
- On-demand, tailorable training programs and supporting materials, retrievable from a centralized data base anytime
- Development of a full confederation of simulations under the National Simulation Center to train the Army at all echelons
- Application of enhanced diagnostic and evaluation tools to identify individual training requirements

Capitalize on emerging Third Wave training technologies and methodologies to support the shift from an institutionally-based to a unit/individually-based training paradigm

- De-emphasize institutional training and increase emphasis on unit-based and self-development training
- Employ resident program instruction only in those situations in which alternative methodologies are unsuitable
- Reduce the number and length of resident training programs and reallocate resources to alternative training methodologies
- Focus on the development and application of exportable programs and supporting training materials
- Link the training institution with units and individuals in the field, via electronic means
- Increase role, responsibility and involvement of individuals in proficiency maintenance and self-development

Identify all key enabling technology requirements to support enhanced distributive training within the AMEDD and submit to TRADOC for investment underwriting

Identify and employ alternative training strategies (e.g., civilian VOTECH, contractor, etc.) in lieu of in-house programs where such would prove feasible, cost-beneficial and equally effective

Ensure the AMEDD's training strategy and implementation plan are fully supportive of the RC's unique training needs and circumstances

- Develop targeted, tailored, on-demand training support packages and materials for use at RC home stations
- Increase billets for RC personnel in resident programs where alternative methodologies are not feasible

- Increase training opportunities for RC personnel in MTF's, across Service and federal agency lines
- Increase participation by RC units at their home stations in simulation exercises, via electronic downlinks
- Repackage resident programs to incorporate distributive training phases for completion on a self-study basis
- Achieve the same training standards and outcomes for AC/RC, but through the innovative application of various methodologies
- Develop rapid train-up packages for post-mobilization refresher training of RC personnel

Ensure that the design and development of all new AMEDD materiel and systems integrates and resources embedded training capabilities, wherever feasible and cost-effective

Develop a program to ensure that all newly accessed AC and RC medical personnel attend required entry level training within the prescribed time frame

Revise Mission Training Plans and External Evaluations for type AMEDD units to address Force XXI Full Dimensional Operations and joint/multinational operations, from war to OOTW

Develop and ensure incorporation of realistic, high-level definition, and full-spectrum medical play in all Army simulations, from combat maneuver battalion level through successive echelons all the way into the CONUS base, and provide the capability to include play by units of other Services' medical departments and other federal agencies (e.g., DVA, PHS, etc.)

Participate with FORSCOM/USARC to substantially increase the capabilities, resources, and utilization of RTS-MED in support of AC/RC/Joint medical training, providing for but not limited to:

- Conduct of EXTEV to MTP standards
- Regional RC medical maintenance support and training
- Video-teleconferencing with supporting MTFs and schools
- Specialized medical training programs
- Selected MOSQ/ASI training programs
- Unit level sustainment training
- Conduct of exercises using simulations

Provide for a revitalized training development capability within the AMEDD

- Support the conduct of valid training needs assessments
- Accommodate increasing requirements for production of on-demand, distributive training support packages and materials
- Expedite the process from identification of valid needs to the delivery of training products and materials to meet those needs
- Fully automate the training development process
- Expand available base of training development Subject Matter Experts through electronic networking

Pursue efforts within the context of ITRO to promote the more cost-effective provision of common medical training among the Services on a shared basis wherever such is practicable

Retain robust, optimized Graduate Medical Education (GME) programs that serve to satisfy physician requirements by specialties and numbers

- Promote the AMEDD's GME program efforts as constituting a national resource
- Consolidate specific GME programs where appropriate to achieve greater economies of scale
- Collaborate with other Services to maximize sharing of existing GME program capabilities

Ensure the provision of high-quality, knowledgeable, and operationally experienced instructors who are adept at employing advanced training technologies, modalities and methodologies

APPENDIX A
TAB 9
Goals and Objectives

KEY STRATEGY # 9

Provide for a robust, world-class medical research and development capability to capitalize on scientific and technological advances that will benefit the Army and eligible beneficiaries

Develop a comprehensive strategy and implementation plan that addresses how the AMEDD will leverage available and future scientific and technological advances to meet its current and future needs across the operational continuum

- Ensure plan interface with Army and DHP POMs, ASTMP, AMP, etc.
- Identify and articulate all medical research and development requirements

Maintain the AMEDD's ability to support Force XXI through a proactive and robust modernization program

- Relate all AMEDD modernization initiatives to one or more of the Army's five modernization objectives
- Participate with TRADOC, AMC, AAE, and SARDA in efforts to shorten time from conceptualization to fielding of materiel
- Incorporate Horizontal Technology Integration across medical materiel and systems, and among the Services
- Apply MANPRINT criteria early in the design and development process
- Employ total package fielding of all new or substantially modernized AMEDD materiel
- Ensure life cycle management approach is applied to all medical materiel and systems
- Coordinate the prioritized fielding of new materiel and capabilities by force package
- Provide for the timely incorporation of AMEDD modernization requirements into the TAP, ASTMP and AMP
- Develop state-of-the-art TMDE and embedded diagnostic capabilities to support new medical materiel and systems

Pursue an aggressive program for continuously exploring the capabilities of rapidly evolving medical technologies and to evaluate their potential for application in casualty care

- Focus on assessment, prevention and management of disease and injury from combat medically related threats
- Leverage research activities and efforts of academia and industry, nationally and internationally

Ensure the programming of resources to support advanced professional development of AMEDD personnel to prepare them for future assignments or careers in military medical research

- Structure functional, operational and leadership assignments to produce future military scientific leaders

Provide for the timely collection, assessment and dissemination of relevant and meaningful medical intelligence among all Services, and with allies and other agencies as appropriate in light of security requirements

- Participate with AFMIC in the development of a prospective data base of medical intelligence for selected areas of the world
- Develop mechanism for the collection, passing, assessment and dissemination of real-time tactical medical intelligence
- Develop a capability at CHPPM to receive and interpret epidemiological data of potential tactical medical intelligence value
- Develop criteria for the medical intelligence preparation of the battlespace, to include identification of EEI and EEFI

Participate fully In TRADOC's Battle Lab program to examine, validate and demonstrate the impact and value-added benefits of new medical technologies, materiel, and operational capabilities

Accelerate research and development efforts to counter the effects of Weapons of Mass Destruction, especially with respect to chemical and biological threats

Exploit telemedicine and rapidly emerging advanced medical technologies for casualty care management that add value, through a "Rapid Prototyping Methodology."

Increase participation with academia and industry, nationally and internationally, to leverage research and development initiatives having dual-use or spin-off applications in both the military and civilian sectors

Ensure the sustainment of modern medical research and development facilities and capabilities, to the same standards as maneuver and training installations

APPENDIX A
TAB 10
Goals and Objectives

KEY STRATEGY # 10

Provide for greater interconnectivity, collaboration and mutually beneficial sharing within the MHSS, among other federal agencies' health systems, and with respect to the private health care industry within the U.S. and the health systems of friendly nations

Work collaboratively at all levels within the AMEDD to aggressively support pursuit of the shared mission and vision for the MHSS and the people it serves, and to implement concepts and capabilities as addressed in the Joint Health Service Support: Vision 2010.

Participate with ASD(HA) in development of a systematic approach to identifying and fielding of medical support capabilities, along the force integration lines of the Army's Enhanced Concept Based Requirements System

Promote greater interface and collaboration with private health care sector organizations and the broader health care industry in the U.S.

- Capitalize on advanced clinical and business practices emanating from the private sector
- Increase participation by and contribution of AMEDD to national health care symposia and conferences
- Expand involvement in activities relating to medical disaster planning, response and support

Promote more effective interface among military health care systems on an international basis, especially among those nations with which the AMEDD could potentially participate in coalition operations, consistent with security considerations

- Increase military-to-military contacts, dialogue, and sharing of information in the health care arena
- Pursue development of compatible, interoperable doctrine and standardization agreements
- Seek to encourage development of parallel infrastructures and organizations that provide for operational fit
- Encourage purchase of DEPMEDS and other medical materiel by foreign nations under the FMS program
- Enhance technical training and military educational opportunities in AMEDD programs by medical personnel of other nations
- Promote the selective exchange of medical staff with key allies
- Identify opportunities for use of AMEDD mobile training teams in support of security assistance program requirements
- Increase participation by and contribution of AMEDD in international health symposia and conferences

Increase the number of qualified AMEDD personnel available for assignment to certified joint medical positions, and who are assigned to such positions

Prepare and maintain a comprehensive listing of all medical mission area requirements for which the Army has been designated, or is anticipated to be designated, as lead agent to provide support to other Services or agencies

- Address, fully clarify, and validate all requirements -- specified, implied, and presumed
- Identify all resource requirements, and shortfalls, associated with each validated requirement
- Identify alternative approaches for fully resourcing each mission requirement
- Pursue acquisition of requisite resources on an equitable, pro-rata basis from consumers of the support

APPENDIX A
TAB 11
Goals and Objectives

KEY STRATEGY # 11

Provide for the consistent maintenance of a high state of go-to-war readiness on the part of both AMEDD units and individuals of all components, and the achievement of a high degree of personal medical readiness throughout the Army.

Develop and maintain an implementation plan for expansion of the AMEDD's CONUS base MTFs to support the Army's portion of the total MHSS hospital expansion bed requirement

- Implement program for periodically exercising the plan to validate its efficacy
- Ensure plan crosswalk with USACOM and other participants in the mobilization bed expansion planning process
- Address mobilization surge, casualty reception, and force expansion requirements

Participate with ASD(HA) and other Services to develop and use a common set of medical deployment criteria

Develop improved criteria and mechanisms for measuring, assessing and displaying the specific functional capability and overall readiness posture of both TOE and TDA units within all components of the AMEDD

Participate in development of a DOD system to both provide and monitor the status of medical readiness training that directly relates to the maintenance of wartime medical skills and capabilities

Ensure the existence of a viable mechanism for the rapid (within 72 hours) crossleveling of deployable AC personnel to fill critical position shortfalls in AC units slated for immediate deployment

Participate with ASD(HA) in the validation of requirements and establishment of early authority to mobilize RC medical units to integrate with AC immediate deployment forces

Ensure the existence of a viable mechanism for the rapid backfill of PROFIS and Caretaker PROFIS by RC personnel

Develop and implement a concept for establishment of an IRR manpower pool from which individuals can be accessed on a by-specialty basis to fill critical position shortfalls in mobilizing RC units.

Participate with ASD(HA) to establish and maintain an automated credentialing system that accurately reflects mobilization and deployment status (to include physical qualifications)

Maintain efficacy of the PROFIS program

- Reduce PROFIS turnover
- Increase pool of PROFIS qualified personnel
- Improve quality of field training for PROFIS personnel

- Focus PROFIS training on development of operational skills with using equipment under simulated wartime environments
- Ensure readiness of PROFIS personnel to deploy on immediate notice when required

Develop a program to offset the negative impact of downsizing on the maintenance of wartime-related trauma management skills on the part of AC and RC providers

- Maintain robust capability to manage medical problems not encountered in peacetime operations

APPENDIX A
TAB 12
Goals and Objectives

KEY STRATEGY # 12

Provide the AMEDD's customers and publics with an understanding and appreciation of the value-added benefits of health services provided by the AMEDD and the MHSS

Develop and maintain a comprehensive strategy and implementation plan that addresses both internal and external marketing requirements and approaches to be employed

- Identify each of the AMEDD's customer audiences
- Determine approach for best reaching each audience, and objectives to be achieved
- Clarify roles and responsibilities of AMEDD personnel at all echelons in support of the marketing effort
- Establish quantifiable goals and objectives to be achieved from marketing efforts
- Develop metrics for measuring effectiveness of marketing efforts

Develop relevant mechanisms to continuously assess customers' needs, expectations and perceptions, and internal procedures and processes for effectively and expeditiously acting on such feedback

Develop tailored information programs for educating future Army leaders (at OAC, C&GSC, SMA, USAWC, etc.) as to the importance of the AMEDD to them, their Soldiers, and Army families

Develop and implement a plan and associated program for providing senior leaders (CINCs, MACOMs, MSCs, etc.) and their staffs with periodic updates as to key AMEDD successes, initiatives, challenges, etc.

APPENDIX A
TAB 13
Goals and Objectives

KEY STRATEGY # 13

Provide for the timely and effective crosswalk between planning and programming activities and processes to ensure the adequate resourcing of essential AMEDD capabilities under the Army and DHP POMs.

Reorganize internal procedures and processes to provide more time for studied development, review, crosswalk, and integration of input from MSCs to the MEDCOM POM

- Develop new time-phased schedule for development and submission of POM input to MEDCOM from subordinate MSCs
- Develop procedures for early-on coordination and review of MEDCOM's draft POM input with other MACOMs, as appropriate
- Ensure coordination of all CINC IPL issues in development of POM input
- Effect early-on liaison regarding content of other MACOM POMs that contain initiatives of significant import to the AMEDD
- Develop plan and program to better prepare MEDCOM representatives to participate in PEG activities, prior to their convening
- Track status of other MACOMs' POM initiatives that are of substantial interest to the AMEDD

Reorganize MEDCOM's strategic planning process and approach to better coincide with the Army and DHP POM development process

- Reorder strategic planning activities in sequential order in light of a biennial planning cycle
- Develop schematic displaying all key activities and milestones in the MEDCOM biennial strategic planning process
- Link strategic planning participants electronically via e-mail to expedite information flow and communication
- Establish single data repository for all pertinent planning references, electronically accessible to all authorized parties

Participate with ASD(HA) in efforts to reengineer the POM process at DOD level to allow more time for development of CINC input, and to calculate and validate medical requirements in support of Illustrative Planning Scenarios

- Ensure liaison is maintained with CINC staff via ARFOR component to identify significant medical issues and needs

APPENDIX B

SKELETAL OUTLINES ALTERNATIVE HEALTH SERVICE DELIVERY SYSTEMS

DEFENSE HEALTH AGENCY (DHA)

- * Supports Army, USAF, USN in CONUS
- * MTFs removed from respective Services' separate ownership and control
- * System under direction of DOD-level agency
 - ** Reports to DOD; ASD(HA) major player as policy maker
 - ** Regional offices to operate system, along line of TRICARE Lead Agent Activities
 - ** Requires legislative action to be established
- * Multiple staffing options, including
 - ** Respective Services, as now
 - ** Respective Services, augmented by DOD civilians/contractors
 - ** DOD civilians only in MTFs, no uniformed personnel
 - ** Government Owned, Contractor Operated (GOCO)
- * Beneficiary populations serviced
 - ** Services only -- Army, USAF, USN (active, dependents, retirees)
- * Service TSGs remain, Service-level staff role only
- * TOE medical units remain with respective Services
- * Services' medical, uniformed end strengths reduced -- a little
- * MEDCOM, and other Service equivalents -- absorbed by DHA as bill payers
- * Funding from DOD
- * Consolidation/closure/downsizing of MTFs -- some

JOINT MEDICAL COMMAND (JMEDCOM)

- * Supports Army, USAF, USN in CONUS
- * MTFs removed from respective Services' separate ownership and control
- * System under direction of jointly staffed, uniformed command
 - ** Reports to DOD; ASD(HA) major player as policy maker
 - ** Regional commands to operate system, staffed with uniformed and civilian personnel
 - ** Requires legislative action to be established
- * Multiple staffing options, including
 - ** Respective Services, as now
 - ** Respective Services, augmented by DOD civilians/contractors
 - ** DOD civilians only in MTFs, no uniformed personnel
 - ** GOCO for selected MTFs
- * Beneficiary populations serviced
 - ** Services only -- Army, USAF, USN (active, dependents, retirees)
- * Service TSGs remain, Service-level staff role only
- * TOE medical units transferred to Service components of JMEDCOM
- * Services' medical, uniformed end strengths reduced -- a little
- * MEDCOM, and other Service equivalents -- absorbed by JMEDCOM as bill payers
- * Funding from DOD
- * Consolidation/closure/downsizing of MTFs -- some

FEDERAL HEALTH SERVICE (FHS)

- * Supports multiple Services/Departments, primarily in CONUS
 - ** Services -- Army, USAF, USN
 - ** Department of Veterans Administration (DVA)
 - ** Indian Health Service (IHS)
 - ** Public Health Service (PHS)
- * MTFs removed from respective Services'/Departments' separate ownership and control
- * System under direction of separate federal agency (perhaps DVA, but would have to be settled)
 - ** Reports to a cabinet-level office (perhaps DVA)
 - ** Roles/responsibilities/involvement would have to be sorted out among Services/Departments
 - ** ASD(HA) role might only involve review and comment, perhaps advice and concurrence
 - ** Regional offices to operate system, built from DVA, Services, TRICARE Lead Agents)
 - ** Requires legislation to change laws and eligibility programs
- * Multiple staffing options, including
 - ** Respective Services/Departments, as now
 - ** Respective Departmental civilians only in MTFs, no uniformed personnel
 - ** Respective Services/Departments, less uniformed staff and augmented by civilians/contractors
 - ** TRICARE contracts expanded beyond Services to include other eligible beneficiaries
 - ** GOCO for selected MTFs
- * Beneficiary populations serviced
 - ** Services -- Army, USAF, USN (active, dependents, retired)
 - ** Eligible veterans
 - ** Eligible IHS and Native American beneficiaries
 - ** Eligible PHS and Merchant Marine beneficiaries
- * Service TSGs remain, Service-level staff role only
- * TOE medical units remain with respective Services, not part of FHS
- * Services medical, uniformed end strengths reduced -- a little to a lot
- * MEDCOM, other Services equivalents, DVA, PHS, and IHS
 - ** Absorbed by FHS as staffing bill payers, but would have to be sorted out
- * Funding from Congress through applicable Department
- * Consolidation/closure/downsizing of MTFs -- some to possibly substantial

NATIONAL FEDERAL HEALTH SYSTEM (NFHS)

- * Supports multiple Services/Departments, primarily in CONUS
 - ** Services -- Army, USAF, USN
 - ** DVA
 - ** IHS
 - ** PHS
 - ** Medicare Program
 - ** Medicaid Program (possibly)
- * MTFs removed from respective Services'/Departments' separate ownership and control
- * System under direction of separate federal agency (perhaps DHSS, but would have to be settled)
 - ** Reports to a cabinet-level office (perhaps DHSS)
 - ** Roles/responsibilities/involvement would have to be sorted out among Services/Departments
 - ** ASD(HA) role might only involve review and comment, perhaps advice and concurrence
 - ** Regional offices to operate system, how built would have to be sorted out
 - ** Requires substantial legislation to change multiple laws and entitlement programs
- * Multiple staffing options, including
 - ** Respective Services/Departments, as now
 - ** Respective Departmental civilians only in MTFs, no uniformed personnel
 - ** Respective Services/Departments, less uniformed staff and augmented by civilians/contractors
 - ** GOCO for selected MTFs

- ** TRICARE contractors, expanded beyond Services to include other eligible beneficiaries
- ** Total shift to civilian sector of care under managed care program other than TRICARE
- * Beneficiary populations serviced
 - ** Services -- Army, USAF, USN (active, dependents, retired over 65 and dependents over 65)
 - ** Eligible veterans
 - ** Eligible IHS and Native American beneficiaries
 - ** Eligible PHS and Merchant Marine beneficiaries
 - ** Medicare eligible beneficiaries (all programs)
 - ** Medicaid eligible beneficiaries (possibly)
- * Service TSGs remain, Service-level staff role only
- * TOE medical units remain with respective Services, not part of NFHS
- * Services' medical, uniformed end strengths reduced -- a little to a lot
- * MEDCOM, other Services equivalents, DVA, PHS, and IHS
 - ** Absorbed by NFHS as staffing bill payers, but would have to be sorted out
- * Funding from Congress through applicable Department
- * Consolidation/closure/downsizing of MTFs -- unknown, due to incorporation of Medicare eligibles